



PacDrive 3 LMC Eco / Pro / Pro2

Motion controllers for automating
machines/lines with 0 - 130 servo or
robot axes

Quick access to product information

Get technical information about your product

References

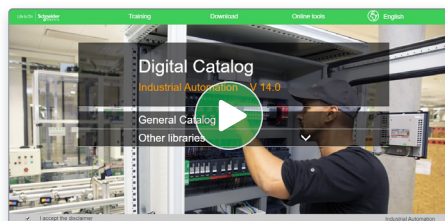
Modicon TM3
I/O expansion modules for Modicon controllers
Analog I/O modules

Number and type of channels	Input range	Output range	Resolution	Aperture time (typical)	Reference	Weight (kg)
2 voltage/current inputs	-15...+15 VDC 0...25 mA A, 25 mA	-15...+15 VDC 0...25 mA A, 25 mA	16 bits of 15 bits + sign	200 ns	TM3AI2H	0.110
4 voltage/current inputs	-15...+15 VDC 0...25 mA A, 25 mA	-15...+15 VDC 0...25 mA A, 25 mA	12 bits of 11 bits + sign	200 ns	TM3AI2H	0.110
4 voltage/current or temperature inputs	-15...+15 VDC 0...25 mA A, 25 mA	-15...+15 VDC 0...25 mA A, 25 mA	16 bits of 15 bits + sign	200 ns	TM3AI2H	0.110
4 differential temperature inputs	-15...+15 VDC 0...25 mA A, 25 mA	-15...+15 VDC 0...25 mA A, 25 mA	16 bits of 15 bits + sign	200 ns	TM3AI2H	0.110

Each commercial reference presented in a catalog contains a hyperlink. Click on it to obtain the technical information of the product:

- Characteristics, Dimensions and drawings, Mounting and clearance, Connections and schemas, Performance curves
- Product image, Instruction sheet, User guide, Product certifications, End of life manual

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PacDrive 3 LMC Eco/Pro/Pro 2

Motion controllers for automating machines/lines

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To be competitive in today's digital era, machine builders must be innovative. Smart machines, those that are better connected, more flexible, more efficient, and safe, are enabling machine builders to innovate in ways never before possible.

EcoStruxure, Schneider Electric's open, IoT-enabled architecture and platform, offers powerful solutions for the digital era. As part of this, EcoStruxure Machine brings powerful opportunities for machine builders and OEMs, empowering them to offer smart machines and compete in the new, digital era.

EcoStruxure Machine brings together key technologies for product connectivity and edge control on premises, and cloud technologies to provide analytics and digital services. EcoStruxure Machine helps you bring more innovation and added value to your customers throughout the entire machine life cycle.

Innovation at Every Level for Machines is full systems across three layers:

- Connected products
Our connected products for measuring, actuating, device level monitoring, and control adhere to open standards to provide unmatched integration opportunities and flexibility
- Edge Control
We are IIoT-ready with a proven set of tested and validated reference architectures that enable the design of end-to-end open, connected, and interoperable systems based on industry standards. Ethernet and OPC UA facilitates IT/OT convergence meaning machine builders reap benefits from web interfaces and cloud.

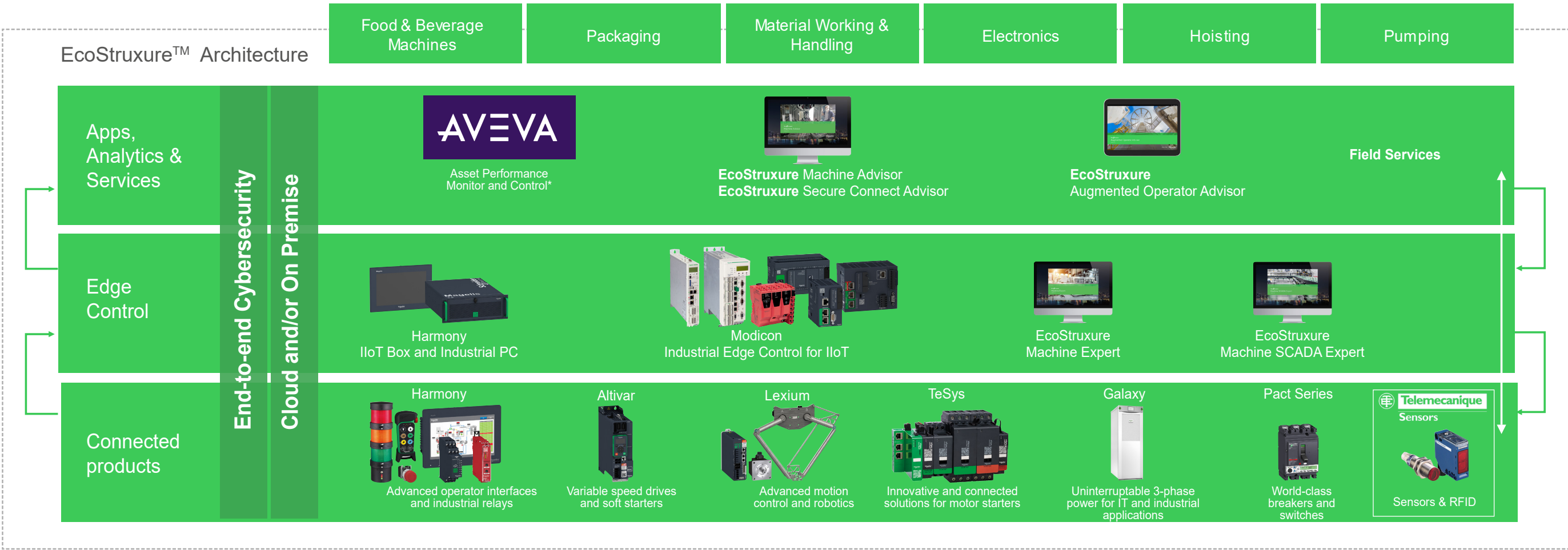
- Apps, Analytics & Services
Seamless integration of machines to the IT layer allows the collection and aggregation of data ready for analysis – for machine builders and end users alike this means increased uptime and the ability to find information faster for more efficient operations and maintenance.

These levels are completely integrated from shop floor to top floor. And we have cloud offers and end-to-end cybersecurity wrapped around.

- EcoStruxure Machine makes it easier for OEMs/ machine builders to offer their customers smarter machines. The advent of smart machines is driven by the changing needs of end users:
- Evolving workforce
 - Reducing costs
 - Dynamic markets
 - Shorter life cycles
 - Prioritizing safety and cybersecurity

- EcoStruxure Machine provides one solution for the whole machine life cycle:
- With Smart Design & Engineering the time to market is reduced by up to 30% using our automated engineering and the simulation capabilities
 - During Commissioning & Operation of the machine, resources such as energy, material and loss can be improved, and with seamless integration to the IT world efficiency can be improved by up to 40%
 - Smart Maintenance & Services reduces the time for corrective actions up to 50%

EcoStruxure™ Machine



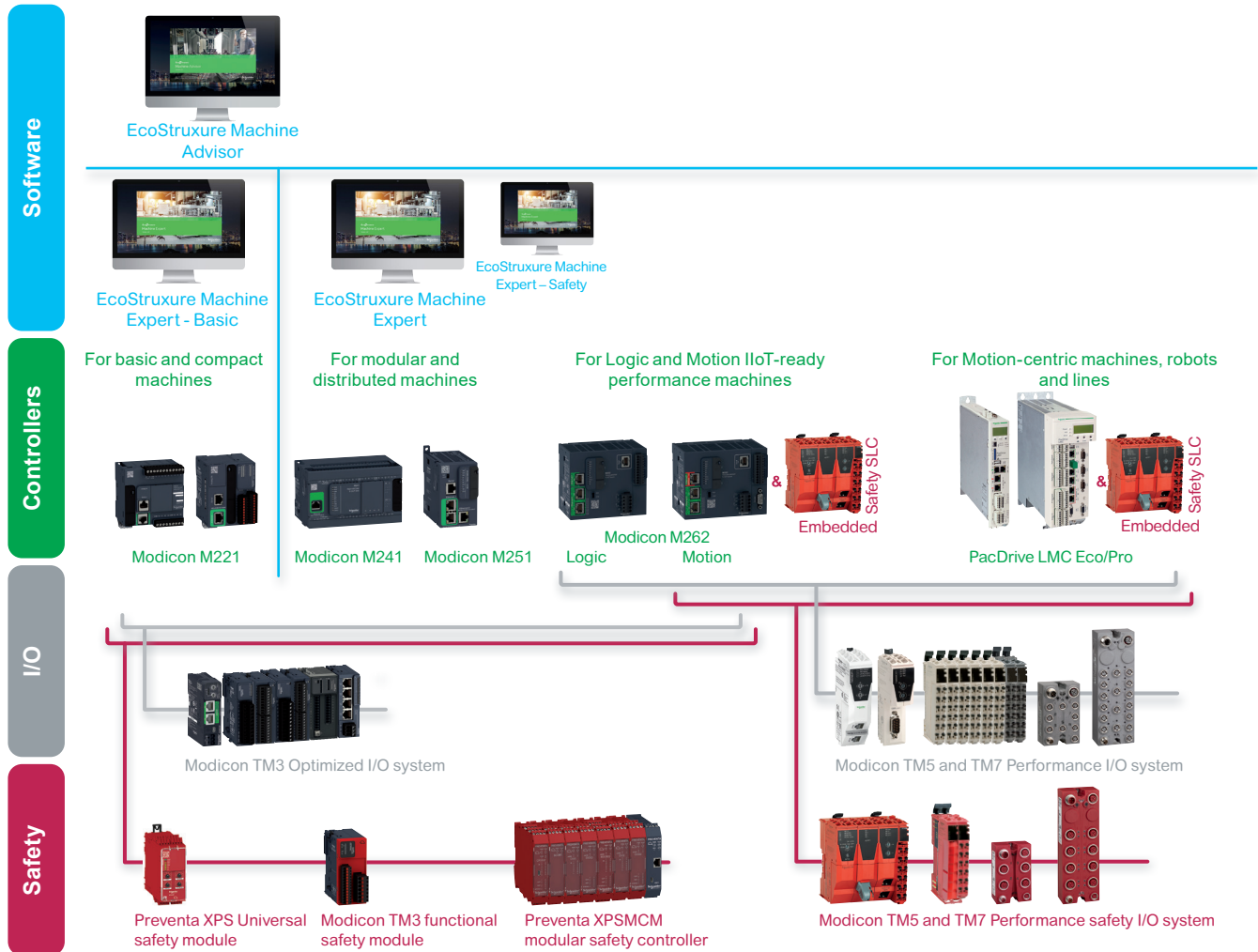
* The Schneider Electric industrial software business and AVEVA have merged to trade as AVEVA Group plc, a UK listed company. The Schneider Electric and Life is On trademarks are owned by Schneider Electric and are being licensed to AVEVA by Schneider Electric.

PacDrive 3 LMC Eco/Pro/Pro 2
Motion controllers for automating machines/lines
Controllers for industrial machines

Applications		Logic controller			Logic/Motion controller		Motion controller	
Type	Specification	For hardwired architectures	For performance-demanding applications		For modular and distributed architectures	IIoT ready for performance machines	For automating machines/lines with 0 - 130 servo or robot axes	
								
Performance		0.2 µs/inst	22 ns/inst		22 ns/inst	3...5 ns/inst	0.5...2 ns/inst	
Memory		640 KB RAM, 2 MB Flash	64 MB RAM, 128 MB Flash		64 MB RAM, 128 MB Flash	192 MB RAM, 256 MB Flash	128 KB to 256 KB NV RAM 512 MB DDR2 to 1 GB DDR3L	
Supply voltage		24 V --- or 100...240 V ~	24 V --- or 100...240 V ~		24 V ---	24 V ---	24 V ---	
Communication fieldbus and networks	Embedded	■ EtherNet/IP ■ RS 232/RS 485 serial link ■ USB mini-B programming port	■ Ethernet ■ CANopen (master) and SAE J1939 ■ 2 serial links ■ USB mini-B programming port		■ EtherNet/IP ■ CANopen (master) and SAE J1939 ■ Serial link ■ USB mini-B programming port	■ EtherNet/IP ■ Sercos III ■ Modbus TCP ■ Serial link ■ USB mini-B programming port	■ EtherNet/IP ■ Sercos III ■ CANopen ■ Profibus ■ Profinet ■ EtherCAT	
	Optional	■ 1 Serial Line	■ Ethernet ■ Profibus DP		■ Ethernet ■ Profibus DP	■ Ethernet ■ CANopen	■ CANopen ■ Profibus DP ■ RT-Ethernet	
Embedded I/O	Input types	Up to 40 logic inputs Up 2 analog inputs	Up to 24 logic inputs		–	4 fast digital inputs	Up to 20 digital inputs Up to 16 touch probe inputs Up to 4 interrupt inputs Up to 2 analog inputs	
	Output types	Up to 16 relay outputs Up to 16 tansistor outputs	Up to 16 tansistor outputs		–	4 fast digital outputs	Up to 16 digital outputs Up to 2 analog outputs	
Synchronized axes		–	–		–	Up to 16 synchronized axes	Up to 130 synchronized axes	
Configuration software		EcoStruxure Machine Expert-Basic (1)	EcoStruxure Machine Expert (2)		EcoStruxure Machine Expert (2)	EcoStruxure Machine Expert (2)	EcoStruxure Machine Expert (2)	
Compatible expansion I/O module ranges (consult the catalog)								
● Local I/O		● Modicon TM3 (DIA3ED2140109EN)	● Modicon TM3 (DIA3ED2140109EN)		● Modicon TM3 (DIA3ED2140109EN)	● Modicon TM3 (DIA3ED2140109EN)	–	
● Remote I/O		● Modicon TM3 (DIA3ED2140109EN)	● Modicon TM3 (DIA3ED2140109EN)		● Modicon TM3 (DIA3ED2140109EN)	● Modicon TM3 (DIA3ED2140109EN)	–	
● Distributed I/O on Ethernet		● Modicon TM3 (DIA3ED2140109EN)	● Modicon TM3 (DIA3ED2140109EN) ● Modicon TM5 (DIA3ED2131204EN)		● Modicon TM3 (DIA3ED2140109EN) ● Modicon TM5 (DIA3ED2131204EN)	● Modicon TM3 (DIA3ED2140109EN) ● Modicon TM5 (DIA3ED2131204EN)	● Modicon TM5 (DIA3ED2131204EN)	
● Distributed I/O on CANopen		–	● Modicon TM3 (DIA3ED2140109EN)		● Modicon TM3 (DIA3ED2140109EN)	● Modicon TM3 (DIA3ED2140109EN) ● Modicon TM5 (DIA3ED2131204EN) ● Modicon TM7 (DIA3ED2140405EN)	● Modicon TM3 (DIA3ED2140109EN) ● Modicon TM5 (DIA3ED2131204EN) ● Modicon TM7 (DIA3ED2140405EN)	
● Distributed I/O on Sercos		–	–		–	● Modicon TM5 (DIA3ED2131204EN)	● Modicon TM5 (DIA3ED2131204EN)	
● Distributed I/O on Modbus Serial Line		● Modicon TM3 (DIA3ED2140109EN)	● Modicon TM3 (DIA3ED2140109EN)		● Modicon TM3 (DIA3ED2140109EN)	● Modicon TM3 (DIA3ED2140109EN)	–	
⚠ Safety I/O		⚠ Modicon TM3 (DIA3ED2140109EN)	⚠ Modicon TM3 (DIA3ED2140109EN)		⚠ Modicon TM3 (DIA3ED2140109EN)	⚠ Modicon TM3 (DIA3ED2140109EN) ⚠ Modicon TM5 (DIA3ED2131204EN) ⚠ Modicon TM7 (DIA3ED2140405EN)	⚠ Modicon TM5 (DIA3ED2131204EN) ⚠ Modicon TM7 (DIA3ED2140405EN)	
Controller range		Modicon M221/M221 Book	Modicon M241		Modicon M251	Modicon M262	LMC Eco, LMC Pro2	
More details in catalog		DIA3ED2140106EN	DIA3ED2140107EN		DIA3ED2140108EN	DIA3ED2180503EN	DIA7ED2160303EN	

(1) Formerly named SoMachine Basic.
(2) Formerly named SoMachine, EcoStruxure Machine Expert merges both former software ranges, SoMachine and SoMachine Motion.

Machine Automation



Machine control

- > From basic to motion- and robot-centric machines with the PacDrive 3 offer, Modicon controllers and solutions bring a consistent and scalable response to achieving flexibility, performance, productivity and digitization.

The scalability and consistency of I/O ranges allow you to select the right offer depending on your needs

- > Modicon TM3 Optimized I/O system for more compact and modular machines
- > Modicon TM5 for more performance-demanding machines, with Modicon TM7 for harsh environments; Both Performance I/O ranges (Modicon TM5 and TM7) allow safety functions to be implemented using the Modicon TM5CSLC safety logic controller

Embedded Safety provides holistic solutions to Modicon M262 and PacDrive LMC controllers, increasing overall safety demand in Machine Automation

- > Preventa XPS Universal safety modules cover a wide range of safety functions, suitable for small applications with 4-5 safety functions, with diagnostic information provided to controllers via a single wire connection
- > Modicon TM3 safety functional modules are suitable for small applications covering E-Stop functions and diagnostics via TM3 bus
- > Preventa XPSMCM modular safety controllers are suitable for medium size applications with up to 20 safety functions and diagnostics via Modbus TCP, EtherNet/IP, EtherCAT, or Profinet

All these devices are managed within a single software, EcoStruxure Machine Expert, a powerful and collaborative engineering environment

- > **EcoStruxure Machine Expert – Safety** optional add-on for programming safety logic controllers
- > **EcoStruxure Machine Expert – Basic** software for programming Modicon M221 logic controllers: an intuitive standalone environment accessible to basic skilled technicians
- > **EcoStruxure Machine Advisor** is a cloud-based services platform designed for machine builders to track machines in operation worldwide, monitor performance data and resolve exceptional events, while reducing support costs by up to 50%

PacDrive 3 LMC Eco/Pro/Pro 2

Motion controllers for automating machines/lines

Machine Automation

Machine Automation

Comprehensive Schneider offers for machine builders

- > Lexium servo drives, motors and robotics are designed to control applications ranging from a single independent axis up to high-performance synchronized multi-axis machines requiring high-speed and precise positioning and movements



[Robotics](#)



[Integrated drives](#)

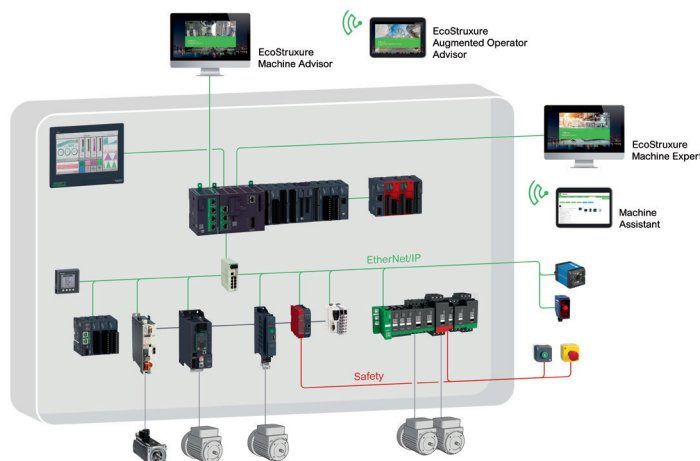


[Servo Drives & Motors](#)

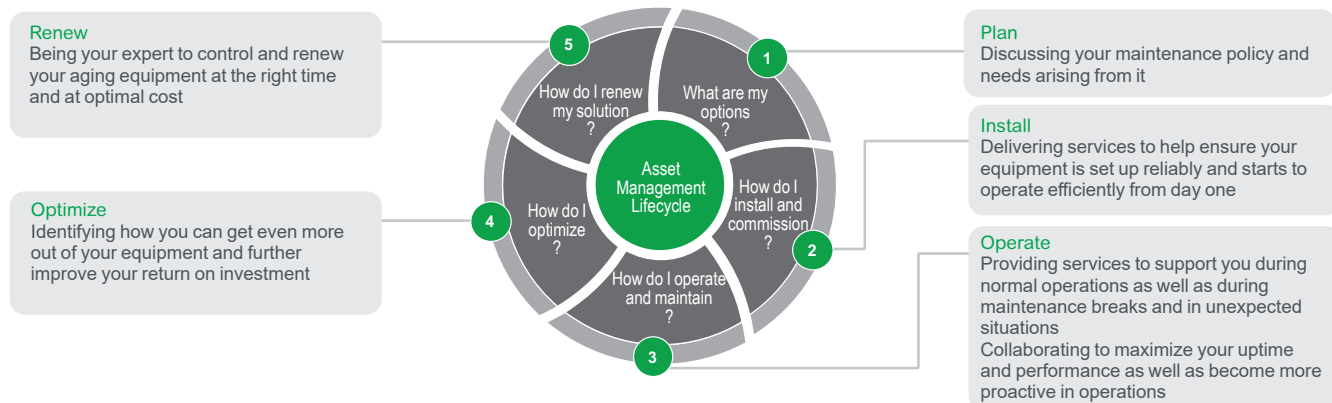


[Steppers Drives & Motors](#)

- > The Lexium offer is designed for a broad range of motion-centric machines in applications such as [Packaging](#), [Material Handling](#), [Material Working](#), [Food and Beverage](#) and [Electronics](#)
- > Schneider Electric has developed Tested Validated & Documented Architectures (TVDA) applicable for generic machine control applications as well as for dedicated segment applications such as Packaging, Material Handling, Hoisting, Pumping, or generic [Machine Control applications](#)



Choose Schneider Electric to help secure your investment and benefit from worldwide services at every step of your project



- > From planning and inception to modernization, we help ensure optimal technical and business performance. Our field service engineers combine 30+ years of manufacturer-level experience with the latest technology to bring innovation to every level of our offer and every step of your project.
- > Our machine control dedicated services empower you to maximize your business infrastructure and face increasingly stringent demands on productivity, safety, equipment availability and performance optimization.

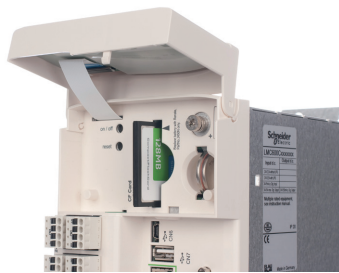
PacDrive 3 LMC Eco/Pro/Pro 2

Motion controllers for automating machines/lines

Controls



PacDrive LMC motion controllers



Memory card

Controls

Scalable performance for high-performance industrial machines

PacDrive LMC motion controllers cover a wide range of applications.

> Full software compatibility

PacDrive LMC motion controllers are a broad family of twelve different controllers, with a powerful CPU for applications requiring 0 to 130 synchronized axes (at 1 msec network update rate)

- up to 130 servo axes, and up to 255 virtual axes
- with multiple fieldbuses used in parallel to Sercos: CANopen, Profibus DP, etc.

All controllers are software-compatible, thanks to EcoStruxure™ Machine Expert programming software, a Logic Motion Runtime software:

- same runtime
- same libraries
- same engineering tool
- same diagnostic tools
- same support of drives, IOs, etc.

Up to 4096 dynamic electronic cam disks can be programmed to operate in parallel. The program can switch between electronic cam disks during operation. All controllers have an integrated PLC (5 µsec for 1000-bit instructions).

> Benefits for you and your customers

- **Diagnostics functionalities included:** integrated software oscilloscope and message logger
- **Outstanding performance:** powerful motion engine
- **Connectivity:** broad support of fieldbuses and IT communication protocols
- **Service-oriented:** memory card for storing/transferring programming and configuration data
- **Easy to service:** no PC required, integrated plaintext display in five languages for system messages and diagnostics

sercos
the automation bus

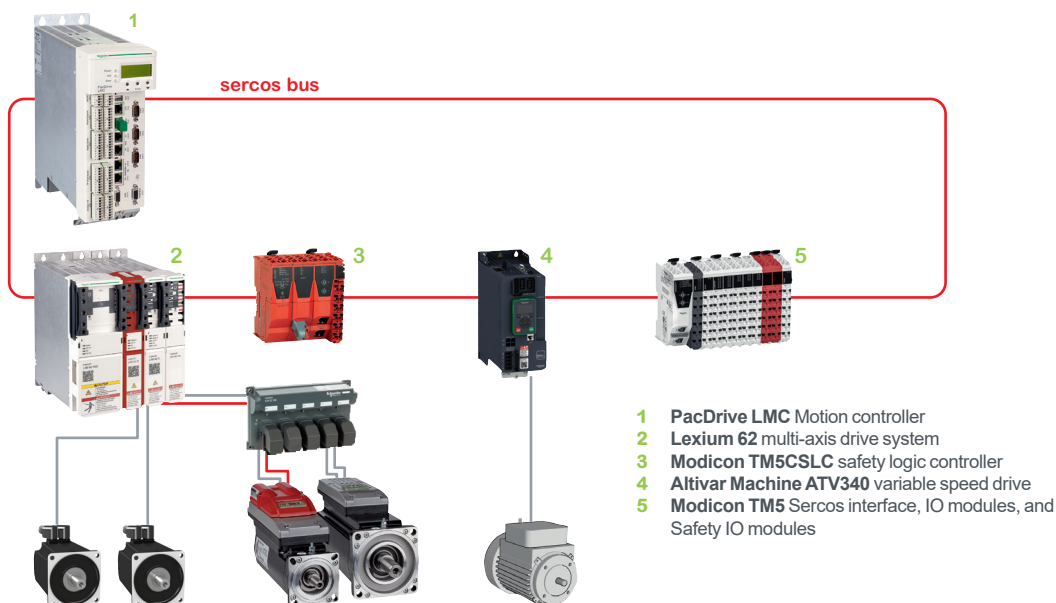
- Cat 5e
- Baudrate: 100 Mbps
- Cycle time: 1...4 ms

Controls

Ethernet-based communication with Sercos

Sercos is the preferred automation bus for PacDrive:

- Drive communication
- I/O communication
- Safe communication and non realtime IP communication
- All embedded in one cable



> Key benefits of Sercos for PacDrive

- **Universal:** fully integrated Ethernet-based solution for drive, fieldbus, and safety communication
- **Reliable:** media redundancy to reduce probability of failure
- **Powerful:** network update rate of 1...4 ms for 130 servo axes. Less than 100 ns jitter
- **Cost-effective:** simple, no hub or switches, Cat 5e cable is generally sufficient
- **High availability:** Sercos supports all PacDrive functions for automating the setup of servo drives/motors, including assignment of bus address
- **Vendor-neutral:** supported by more than 50 controller manufacturers and 30 drive manufacturers
- **Green:** Sercos energy profile defines rules for creating standardized energy modes

> Flexible I/O design with standard and safe I/O

The modular Schneider Electric Modicon TM5 (1) and Modicon TM7 (1) systems for Sercos provide I/O technology with IP 20 and IP 67 protection. Safe communication versions of both TM5 and TM7 safety modules are available, color-coded to clearly differentiate them from standard technology. Standard and safe I/O modules can be mixed.

> Connectivity

- In addition to the Sercos automation bus, PacDrive LMC motion controllers support the following communication standards:

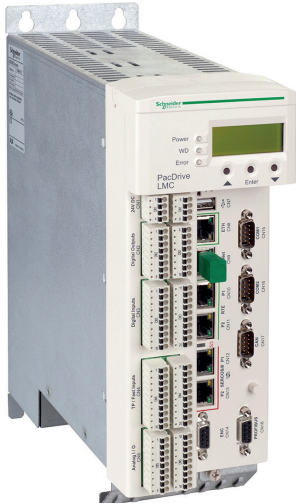
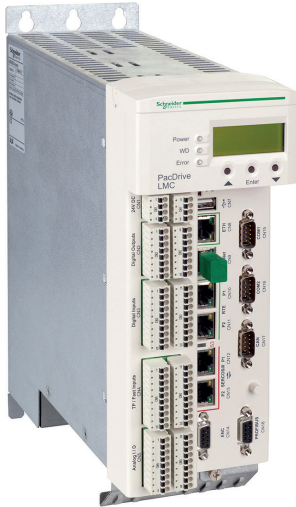
Fieldbuses	IT protocols	Serial communication
- Profinet - Profibus DP - CAN - EtherNet/IP - EtherCat - Modbus TCP	- TCP/IP - UDP/IP - OPC UA - FTP - HTTP (embedded web visualization)	- USB / serial interface

- Optional expansion cards are also available for all controllers to implement additional fieldbus interfaces such as EtherNet/IP. USB and serial interfaces are also standard in all controllers. The PacDrive LMC controllers also have a Profibus DP interface (Master and Slave).

(1) For more information, Please refer to [Modicon TM5, High-Performance and Safe IP20 Modular I/O System catalog](#), and [Modicon TM7, High-Performance and Safe IP67 Distributed I/O System catalog](#).



PacDrive 3 LMC Eco/Pro/Pro 2
Motion controllers for automating machines/lines

Motion controller type		PacDrive LMC Eco						PacDrive LMC Pro			PacDrive LMC Pro2		
		LMC100	LMC101	LMC106	LMC201	LMC212	LMC216	LMC300	LMC400	LMC600	LMC402	LMC802	LMC902
													
Processor		Intel Atom 1.6 GHz 512 KB L2 Cache						Intel Celeron M 1.5 GHz 512 KB L2 Cache	Intel Celeron M 1.5 GHz 1 MB L2 Cache	Intel Pentium M 2 GHz 2 MB L2 Cache	Intel Celeron 2000E 2.2 GHz 2 MB Smart Cache	Intel Celeron 2000E 2.2 GHz 2 MB Smart Cache	Intel Core i5 4410E 2.9 GHz 3 MB Smart Cache
RAM		512 MB DDR2 RAM						512 MB DDR2 RAM			1 GB DDR3L		
Power supply	Supply voltage	24 VDC						24 VDC			24 VDC		
	Supply consumption	30 W						36 W			36 W		
Battery		Yes						Yes			Yes		
Memory card		At least 512 MB (SD Card)						At least 128 MB (CF Card)			At least 128 MB (CF Card)		
Cooling		Passive						Fan			Fan		
Real-Time Clock (RTC)		Yes						Yes			Yes		
Real-Time Operating System		VxWorks and SEAAutomation Kernel						VxWorks and SEAAutomation Kernel			VxWorks and SEAAutomation Kernel		
Input	Digital input	8						20			20		
	Touchprobe input	4						16			16		
	Interrupt input	-						4			4		
	Analog input	-						2			2		
Output	Digital output	8						16			16		
	Analog output	-						2			2		
Number of drives		0 servo axes	4 servo axes	6 servo axes	8 servo axes	12 servo axes	16 servo axes	8 servo axes	16 servo axes	99 servo axes	16 servo axes	130 servo axes	130 servo axes
Integrated communication	CAN	1 (9 pin SUB-D plug x1)						1 (9 pin SUB-D plug x1)			1 (9 pin SUB-D plug x1)		
	RS232	1 (RJ45 x1)						1 (9 pin SUB-D plug x1)			1 (9 pin SUB-D plug x1)		
	RS422/RS485	1 (RJ45 x1)						1 (9 pin SUB-D plug x1)			1 (9 pin SUB-D plug x1)		
	USB-A	1 (USB x1)						1 (USBx1)			1 (USBx1)		
	Profibus DP-DP	-						1 (9 pin SUB-D socket x1)			1 (9 pin SUB-D socket x1)		
	Master encoder	1 (RJ45 x1)						1 (9 pin SUB-D socket x1)			1 (9 pin SUB-D socket x1)		
	Ethernet	1 (RJ45 x1)						1 (RJ45 x1)			1 (RJ45 x1)		
	Realtime Ethernet	-						1 (RJ45 x2)			1 (RJ45 x2)		
	Sercos	1 (RJ45 x2)						1 (RJ45 x2)			1 (RJ45 x2)		
	PacNet	-						1 (RJ45 x1)			1 (RJ45 x1)		

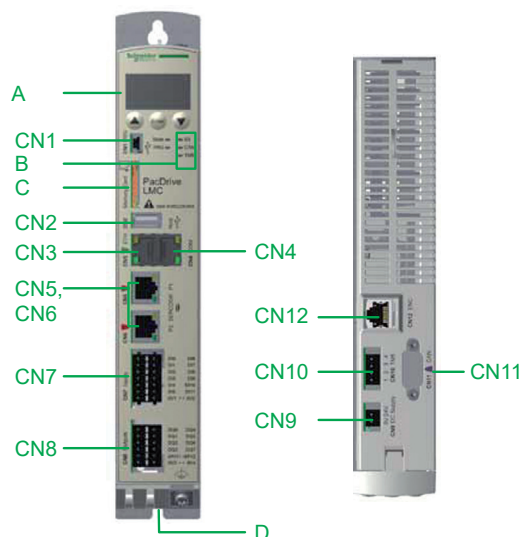
PacDrive 3 LMC Eco/Pro/Pro 2

Motion controllers for automating machines/lines

Motion controller type	PacDrive LMC Eco	PacDrive LMC Pro	PacDrive LMC Pro2
	LMC100, LMC101, LMC106, LMC201, LMC212, LMC216	LMC300, LMC400, LMC600	LMC402, LMC802, LMC902



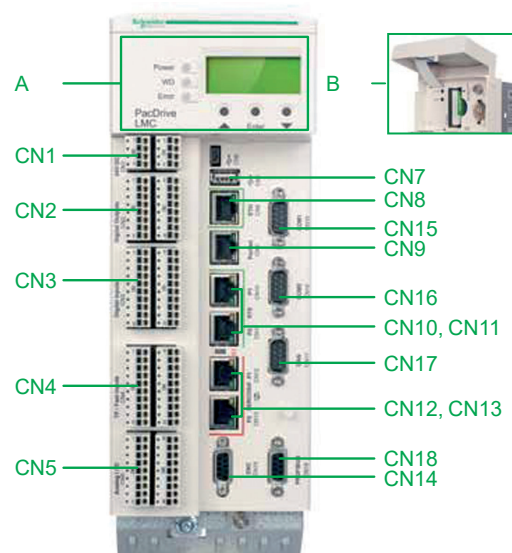
Integrated I/O			
Touchprobe input	Number	4	16
	Nominal input voltage	24 VDC	
	Input filter	100 µs	
	TP0 to TP15	10 µs	
Digital input	Number	8	20
	Nominal input voltage	24 VDC	
	Input filter	—	1 or 5 ms (can be parameterized)
Interrupt input	Number	—	4
	Nominal input voltage	—	24 VDC
	Input filter	—	0.1 or 1 ms (can be parameterized)
Analog input	Number	—	2
	Type	—	Voltage/current
	Range	—	- 10...10 V (resistor 100 kOhm) - 20...20 mA
	Resolution	—	12 bits
Digital output	Number	8	16
	Output voltage	24 VDC	
	Nominal current (I _e)	100 mA per output	250 mA per output
	Transmission time	100 µs	
	Short-circuit protection	Yes	
Analog output	Number	—	2
	Type	—	Voltage
	Range	—	-10...10 V
	Resolution	—	12 bits
Communication			
Bus connections	Integrated motion bus	Sercos	
	Integrated additional fieldbus connection (configuration 1)	CANopen (Master/Slave)	Profibus DP Master/Slave and CANopen (2.0B)
	Integrated additional fieldbus connection (configuration 2)	—	RT-Ethernet (2 ports) and Profibus DP (Master/Slave) or CANopen (2.0B)
	PacNet interface	—	1
Communication/ interface	Serial interfaces	COM1: RS232 COM2: RS422/RS485	
	Network connection	1x Ethernet 10/100 BASE-T	1x Ethernet 10/100/1000 BASE-T
	USB connection	1x USB-A-2.0	
	Master encoder interface	1x Hiperface® master encoder or 1x incremental master encoder	
	Programming interface	Ethernet	
	Additional encoder input via PacNet interface	—	Up to 4 Hiperface encoder inputs and up to 8 incremental master encoder outputs
	Master encoder output via PacNet interface	—	Up to 4x incremental master encoder outputs
	Integrated OPC interface	OPC-UA Server	
	Diagnostic interface for remote maintenance	Ethernet or Modem	
	Communication protocols	HTTP (Hypertext Transfer Protocol) FTP (File Transfer Protocol)	
	Communication modules	1 Option module	Up to 2 Option modules
		■ RT-Ethernet □ Profinet IO-RT (Controller) □ EtherNet/IP (Scanner / Adapter) □ EtherCAT IO (Master/Slave) ■ Profibus DP (Master/Slave)	■ CANopen ■ Profibus DP ■ RT-Ethernet □ Profinet IO-RT (Controller) □ EtherNet/IP (Scanner / Adapter) □ EtherCAT IO (Master/Slave) ■ RT-Ethernet x2 ■ RT-Ethernet and CANopen ■ RT-Ethernet and Profibus DP



PacDrive LMC Eco controller

LMC100, LMC101, LMC106, LMC201, LMC212, LMC216

Item	Function
A	LCD and LED
B	LED connector
C	SD card
D	Optional module slots
CN1	USB client (not active)
CN2	USB Host
CN3	Ethernet
CN4	COM: RS232/RS485
CN5, CN6	Sercos
CN7	12 digital input and 4 touchprobe input
CN8	8 digital output
CN9	24 VDC power supply
CN10	Not active
CN11	CAN/CANopen
CN12	Master encoder

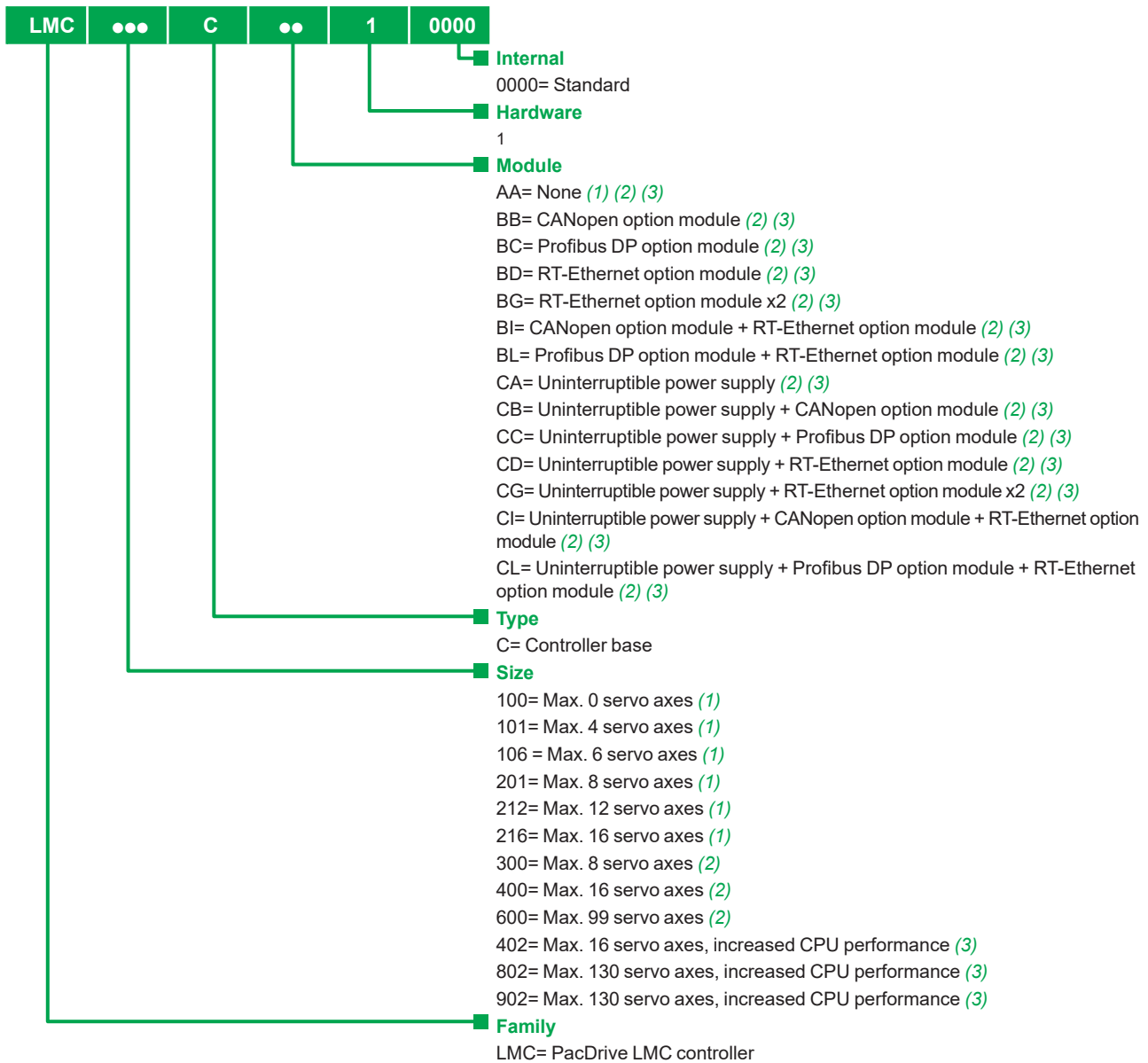


PacDrive LMC Pro and Pro2 controller

LMC300, LMC400, LMC600, LMC402, LMC802, LMC902

Item	Function
A	LCD and LED
B	CF card and battery
CN1	24 VDC power supply and Watchdog
CN2	16 digital output
CN3	20 digital input
CN4	16 touchprobe input and 4 fast input
CN5	2 analog input and 2 analog output
CN7	USB host
CN8	Ethernet
CN9	PacNet
CN10, CN11	RT-Ethernet
CN12, CN13	Sercos
CN14	Master encoder
CN15	COM1: RS232
CN16	COM2: RS422/RS485
CN17	CANopen
CN18	Profibus DP

PacDrive LMC Eco/Pro/Pro 2 controllers



(1) For PacDrive LMC Eco controllers.

(2) For PacDrive LMC Pro controllers.

(3) For PacDrive LMC Pro2 controllers.

PacDrive 3 LMC Eco/Pro/Pro 2

Motion controllers for automating machines/lines

PacDrive LMC Eco controllers



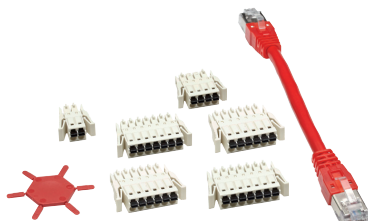
PacDrive LMC Eco controller



VW3E704000000



VW3E704100000



VW3E6019



VW3E70360AA00

PacDrive LMC Eco controllers

Size	Max. number of controlled servo axes	Options	Reference	Weight kg/lb
LMC100	0	– (basic)	LMC100CAA10000	2.200/ 4.85
LMC101	4	– (basic)	LMC101CAA10000	
LMC106	6	– (basic)	LMC106CAA10000	
LMC201	8	– (basic)	LMC201CAA10000	
LMC212	12	– (basic)	LMC212CAA10000	
LMC216	16	– (basic)	LMC216CAA10000	

Nota: Accessory kit included in controller packaging as described below.

Spare parts for PacDrive LMC Eco controllers

Communication modules

Designation	Description	Reference	Weight kg/lb
Communication module Profibus DP	1x 9 pin SUB-D	VW3E704000000	0.080/ 0.18
Communication module Ethernet real time (RT)	2x RJ45 ports	VW3E704100000	0.080/ 0.18

Spare parts

Designation	Description	Reference	Weight kg/lb
Accessory kit	Complete connector set for PacDrive LMC Eco controllers (100C...216C) and Sercos cable (0.13 m / 0.43ft)	VW3E6019	0.100/ 0.22
SD card	512 MB	VW3E70360AA00	0.025/ 0.06

Programming software

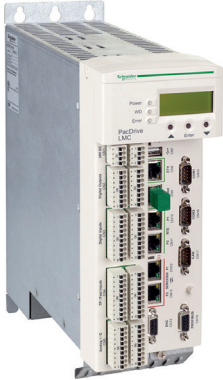
EcoStruxure Machine Expert software

Please refer to our [EcoStructure Machine Expert catalog](#)

PacDrive 3 LMC Eco/Pro/Pro 2

Motion controllers for automating machines/lines

PacDrive LMC Pro controllers



PacDrive LMC Pro controller

PacDrive LMC Pro controllers				
Size	Max. number of controlled servo axes	Options	Reference	Weight kg/lb
LMC300	8	– (basic)	LMC300CAA10000	3.500/ 7.72
		CANopen option module	LMC300CBB10000	
		Profibus DP option module	LMC300CBC10000	
		RT-Ethernet option module	LMC300CBD10000	
		2x RT-Ethernet option modules	LMC300CBG10000	
		1x CANopen option module + 1x RT-Ethernet option module	LMC300CBI10000	
		1x Profibus DP option module + 1x RT-Ethernet option module	LMC300CBL10000	
		Uninterruptible power supply	LMC300CCA10000	
		CANopen option module + Uninterruptible power supply	LMC300CCB10000	
		Profibus DP option module + Uninterruptible power supply	LMC300CCC10000	
		RT-Ethernet option module + Uninterruptible power supply	LMC300CCD10000	
		2x RT-Ethernet option modules + Uninterruptible power supply	LMC300CCG10000	
		1x CANopen option module + 1x RT-Ethernet option module + Uninterruptible power supply	LMC300CCI10000	
		1x Profibus DP option module + 1x RT-Ethernet option module + Uninterruptible power supply	LMC300CCL10000	
LMC400	16	– (basic)	LMC400CAA10000	3.500/ 7.72
		CANopen option module	LMC400CBB10000	
		Profibus DP option module	LMC400CBC10000	
		RT-Ethernet option module	LMC400CBD10000	
		2x RT-Ethernet option modules	LMC400CBG10000	
		1x CANopen option module + 1x RT-Ethernet option module	LMC400CBI10000	
		1x Profibus DP option module + 1x RT-Ethernet option module	LMC400CBL10000	
		Uninterruptible power supply	LMC400CCA10000	
		CANopen option module + Uninterruptible power supply	LMC400CCB10000	
		Profibus DP option module + Uninterruptible power supply	LMC400CCC10000	
		RT-Ethernet option module + Uninterruptible power supply	LMC400CCD10000	
		2x RT-Ethernet option modules + Uninterruptible power supply	LMC400CCG10000	
		1x CANopen option module + 1x RT-Ethernet option module + Uninterruptible power supply	LMC400CCI10000	
		1x Profibus DP option module + 1x RT-Ethernet option module + Uninterruptible power supply	LMC400CCL10000	
LMC600	99	– (basic)	LMC600CAA10000	3.500/ 7.72
		CANopen option module	LMC600CBB10000	
		Profibus DP option module	LMC600CBC10000	
		RT-Ethernet option module	LMC600CBD10000	
		2x RT-Ethernet option modules	LMC600CBG10000	
		1x CANopen option module + 1x RT-Ethernet option module	LMC600CBI10000	
		1x Profibus DP option module + 1x RT-Ethernet option module	LMC600CBL10000	
		Uninterruptible power supply	LMC600CCA10000	
		CANopen option module + Uninterruptible power supply	LMC600CCB10000	
		Profibus DP option module + Uninterruptible power supply	LMC600CCC10000	
		RT-Ethernet option module + Uninterruptible power supply	LMC600CCD10000	
		2x RT-Ethernet option modules + Uninterruptible power supply	LMC600CCG10000	
		1x CANopen option module + 1x RT-Ethernet option module + Uninterruptible power supply	LMC600CCI10000	
		1x Profibus DP option module + 1x RT-Ethernet option module + Uninterruptible power supply	LMC600CCL10000	

Nota: Accessory kit included in controller packaging as described below.

Spare parts for PacDrive LMC Pro controllers

Spare parts

Designation	Description	Reference	Weight kg/lb
Accessory kit	Complete connector set for PacDrive LMC Pro/Pro2 controllers and Sercos cable (0.13 m / 0.43ft)	VW3E6004	0.100/ 0.22
Compact flash memory card	512 MB	VW3E70350AA00	0.025/ 0.06
Battery	Lithium battery front, 3 V	VW3E6020	0.060/ 0.13

Programming software

EcoStruxure Machine Expert software

Please refer to our [EcoStructure Machine Expert catalog](#)



VW3E6004



VW3E70350AA00

PacDrive 3 LMC Eco/Pro/Pro 2

Motion controllers for automating machines/lines

PacDrive LMC Pro2 controllers



PacDrive LMC Pro2 controller

PacDrive LMC Pro2 controllers				
Size	Max. number of controlled servo axes	Options	Reference	Weight kg/lb
LMC402	16	– (basic)	LMC402CAA10000	3.500/ 7.72
		CANopen option module	LMC402CBB10000	
		Profibus DP option module	LMC402CBC10000	
		RT-Ethernet option module	LMC402CBD10000	
		2x RT-Ethernet option modules	LMC402CBG10000	
		1x CANopen option module + 1x RT-Ethernet option module	LMC402CBI10000	
		1x Profibus DP option module + 1x RT-Ethernet option module	LMC402CBL10000	
		Uninterruptible power supply	LMC402CCA10000	
		CANopen option module + Uninterruptible power supply	LMC402CCB10000	
		Profibus DP option module + Uninterruptible power supply	LMC402CCC10000	
		RT-Ethernet option module + Uninterruptible power supply	LMC402CCD10000	
		2x RT-Ethernet option modules + Uninterruptible power supply	LMC402CCG10000	
		1x CANopen option module + 1x RT-Ethernet option module + Uninterruptible power supply	LMC402CCI10000	
		1x Profibus DP option module + 1x RT-Ethernet option module + Uninterruptible power supply	LMC402CCL10000	
LMC802	130	– (basic)	LMC802CAA10000	3.500/ 7.72
		CANopen option module	LMC802CBB10000	
		Profibus DP option module	LMC802CBC10000	
		RT-Ethernet option module	LMC802CBD10000	
		2x RT-Ethernet option modules	LMC802CBG10000	
		1x CANopen option module + 1x RT-Ethernet option module	LMC802CBI10000	
		1x Profibus DP option module + 1x RT-Ethernet option module	LMC802CBL10000	
		Uninterruptible power supply	LMC802CCA10000	
		CANopen option module + Uninterruptible power supply	LMC802CCB10000	
		Profibus DP option module + Uninterruptible power supply	LMC802CCC10000	
		RT-Ethernet option module + Uninterruptible power supply	LMC802CCD10000	
		2x RT-Ethernet option modules + Uninterruptible power supply	LMC802CCG10000	
		1x CANopen option module + 1x RT-Ethernet option module + Uninterruptible power supply	LMC802CCI10000	
		1x Profibus DP option module + 1x RT-Ethernet option module + Uninterruptible power supply	LMC802CCL10000	
LMC902	130	– (basic)	LMC902CAA10000	3.500/ 7.72
		CANopen option module	LMC902CBB10000	
		Profibus DP option module	LMC902CBC10000	
		RT-Ethernet option module	LMC902CBD10000	
		2x RT-Ethernet option modules	LMC902CBG10000	
		1x CANopen option module + 1x RT-Ethernet option module	LMC902CBI10000	
		1x Profibus DP option module + 1x RT-Ethernet option module	LMC902CBL10000	
		Uninterruptible power supply	LMC902CCA10000	
		CANopen option module + Uninterruptible power supply	LMC902CCB10000	
		Profibus DP option module + Uninterruptible power supply	LMC902CCC10000	
		RT-Ethernet option module + Uninterruptible power supply	LMC902CCD10000	
		2x RT-Ethernet option modules + Uninterruptible power supply	LMC902CCG10000	
		1x CANopen option module + 1x RT-Ethernet option module + Uninterruptible power supply	LMC902CCI10000	
		1x Profibus DP option module + 1x RT-Ethernet option module + Uninterruptible power supply	LMC902CCL10000	

Nota: Accessory kit included in controller packaging as described below.

Spare parts for PacDrive LMC Pro2 controllers				
Spare parts				
Designation	Description	Reference	Weight kg/lb	
Accessory kit	Complete connector set for PacDrive LMC Pro/Pro2 controllers and Sercos cable (0.13 m/ 0.43ft)	VW3E6004	0.100/ 0.22	
Compact flash memory card	512 MB	VW3E7037000000	0.025/ 0.06	
Battery	Lithium battery front, 3 V	VW3E6020	0.060/ 0.13	

Programming software

EcoStruxure Machine Expert software

Please refer to our [EcoStructure Machine Expert catalog](#)



VW3E6004



VW3E7037000000

PacDrive 3 LMC Eco/Pro/Pro 2

Motion controllers for automating machines/lines
Cables, terminals



VW3E5001R005

Cables, terminals

Sercos cables

Designation	Length m	ft	Reference	Weight kg/lb
Sercos cables for redundant Sercos ring Equipped with two RJ45 connectors	0.5	1.640	VW3E5001R005	0.045 / 0.10
	1	3.281	VW3E5001R010	0.065 / 0.14
	1.5	4.921	VW3E5001R015	0.068 / 0.15
	2	6.562	VW3E5001R020	0.081 / 0.18
	3	9.843	VW3E5001R030	0.124 / 0.27
	5	16.404	VW3E5001R050	0.199 / 0.44
	10	32.808	VW3E5001R100	0.325 / 0.72
	15	49.213	VW3E5001R150	0.610 / 1.34
	20	65.617	VW3E5001R200	0.810 / 1.79
	25	82.021	VW3E5001R250	1.020 / 2.25
	30	98.425	VW3E5001R300	1.220 / 2.69
	40	131.234	VW3E5001R400	3.100 / 6.83
	50	164.042	VW3E5001R500	2.020 / 4.45

Encoder cables

Incremental master encoder cable (UL)	1.5	4.921	VW3E2097R015	0.196 / 1.43
	5	16.404	VW3E2097R050	0.415 / 0.91
	10	32.808	VW3E2097R100	0.757 / 1.67
	15	49.213	VW3E2097R150	1.087 / 2.40
	20	65.617	VW3E2097R200	1.417 / 3.12
	30	98.425	VW3E2097R300	2.077 / 4.58
	40	131.234	VW3E2097R400	2.737 / 6.03
	50	164.042	VW3E2097R500	3.397 / 7.49

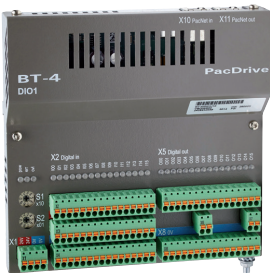
PacNet terminals

Designation	Description	Reference	Weight kg/lb
Bus terminal – 4/DIO1	PacNet bus terminal 16x digital inputs/16x digital outputs	VBO04S00	0.980 / 2.16
Bus terminal– 4/Enc1	PacNet bus terminal 2x master encoder inputs (incremental or SinCos) / 1x incremental encoder input and output	VBO05S00	0.790 / 1.74

PacNet and Patch cables (controller-Bus terminal-4) (1)

Designation	Length m	ft	Reference	Weight kg/lb
PacNet cables	0.5	1.640	VW3E3001R005	0.027 / 0.06
	1	3.281	VW3E3001R010	0.054 / 0.12
	2	6.562	VW3E3001R020	0.108 / 0.24
	3	9.843	VW3E3001R030	0.162 / 0.36
	5	16.404	VW3E3001R050	0.270 / 0.60
	10	32.808	VW3E3001R100	0.540 / 1.19
Patch cables	15	49.213	VW3E3001R150	0.810 / 1.78
	20	65.617	VW3E3001R200	1.080 / 2.38
	25	82.021	VW3E3001R250	1.350 / 2.98
	30	98.425	VW3E3001R300	1.620 / 3.57
	40	131.234	VW3E3001R400	2.160 / 4.76
	50	164.042	VW3E3001R500	2.700 / 5.95

(1) PacNet cables are available only in the given lengths.



VBO04S00



VBO05S00

PacDrive 3 LMC Eco/Pro/Pro 2

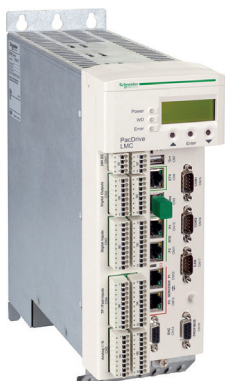
Motion controllers for automating machines/lines
Robot controllers



LMC101CAA●●●●●



LMC300CAA●●●●●



LMC400CAA●●●●●



LMC600CAA●●●●●

Robot controllers				
Size	Number of synchronized servo axes	Number of license points included	Reference	Weight kg/lb
PacDrive LMC Eco robot controllers				
LMC101	up to 4	80	LMC101CAA150RC	3.500/7.72
LMC201	up to 8	80	LMC201CAA150RC	
		160	LMC201CAA170RC	
PacDrive LMC Pro robot controllers				
LMC300	up to 8	80	LMC300CAA150RC	3.500/7.72
		160	LMC300CAA170RC	
		240	LMC300CAA180RC	
		320	LMC300CAA190RC	
LMC400	up to 16	80	LMC400CAA150RC	
		160	LMC400CAA170RC	
		240	LMC400CAA180RC	
		320	LMC400CAA190RC	
LMC600	up to 99	80	LMC600CAA150RC	
		160	LMC600CAA170RC	
		240	LMC600CAA180RC	
		320	LMC600CAA190RC	
		999	LMC600CAA1D0RC	

Robot controller includes a number of license points and free support for robotics.
For details, Please refer to [EcoStruxure Machine Expert catalog](#)

L			
LMC100CAA10000	15	LMC600CAA180RC	19
LMC101CAA10000	19	LMC600CAA190RC	19
LMC101CAA150RC	15	LMC600CAA1D0RC	16
LMC106CAA10000	15	LMC600CBB10000	16
LMC201CAA10000	19	LMC600CBC10000	16
LMC201CAA150RC	19	LMC600CBD10000	16
LMC201CAA170RC	15	LMC600CBG10000	16
LMC212CAA10000	15	LMC600CBI10000	16
LMC216CAA10000	15	LMC600CBL10000	16
LMC300CAA10000	19	LMC600CCA10000	16
LMC300CAA150RC	19	LMC600CCB10000	16
LMC300CAA170RC	19	LMC600CCC10000	16
LMC300CAA180RC	19	LMC600CCD10000	16
LMC300CAA190RC	16	LMC600CCG10000	16
LMC300CBB10000	16	LMC600CCI10000	16
LMC300CBC10000	16	LMC600CCL10000	16
LMC300CBD10000	16	LMC802CAA10000	17
LMC300CBG10000	16	LMC802CBB10000	17
LMC300CBI10000	16	LMC802CBC10000	17
LMC300CBL10000	16	LMC802CBD10000	17
LMC300CCA10000	16	LMC802CBG10000	17
LMC300CCB10000	16	LMC802CBI10000	17
LMC300CCC10000	16	LMC802CBL10000	17
LMC300CCD10000	16	LMC802CCA10000	17
LMC300CCG10000	16	LMC802CCB10000	17
LMC300CCI10000	16	LMC802CCG10000	17
LMC300CCL10000	16	LMC802CCI10000	17
LMC400CAA10000	19	LMC802CCL10000	17
LMC400CAA150RC	19	LMC902CAA10000	17
LMC400CAA170RC	19	LMC902CBB10000	17
LMC400CAA180RC	19	LMC902CBC10000	17
LMC400CAA190RC	16	LMC902CBD10000	17
LMC400CBB10000	16	LMC902CBG10000	17
LMC400CBC10000	16	LMC902CBI10000	17
LMC400CBD10000	16	LMC902CBL10000	17
LMC400CBG10000	16	LMC902CCA10000	17
LMC400CBI10000	16	LMC902CCB10000	17
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LMC402CAA10000	17	VBO05S00	18
LMC402CBB10000	17	VW3E2097R015	18
LMC402CBC10000	17	VW3E2097R050	18
LMC402CBD10000	17	VW3E2097R100	18
LMC402CBG10000	17	VW3E2097R150	18
LMC402CBI10000	17	VW3E2097R200	18
LMC402CBL10000	17	VW3E2097R300	18
LMC402CCA10000	17	VW3E2097R400	18
LMC402CCB10000	17	VW3E2097R500	18
LMC402CCC10000	17	VW3E3001R005	18
LMC402CCD10000	17	VW3E3001R010	18
LMC402CCG10000	17	VW3E3001R020	18
LMC402CCI10000	17	VW3E3001R030	18
LMC402CCL10000	17	VW3E3001R050	18
LMC600CAA10000	19	VW3E3001R100	18
LMC600CAA150RC	19	VW3E3001R150	18
LMC600CAA170RC	19	VW3E3001R200	18
		VW3E3001R250	18
		VW3E3001R300	18
		VW3E3001R400	18
		VW3E3001R500	18
		VW3E5001R005	18
		VW3E5001R010	18
		VW3E5001R015	18
		VW3E5001R020	18
		VW3E5001R030	18
		VW3E5001R050	18
		VW3E5001R100	18
		VW3E5001R150	18
		VW3E5001R200	18
		VW3E5001R250	18
		VW3E5001R300	18
		VW3E5001R400	18
		VW3E5001R500	18
		VW3E6004	16
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		VW3E6019	15
		VW3E6020	16
			17
		VW3E70350AA00	16
		VW3E70360AA00	15
		VW3E7037000000	15
		VW3E704000000	15
		VW3E704100000	17

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