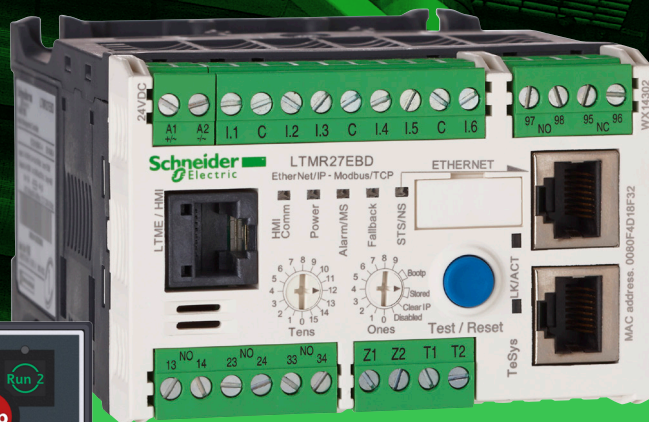


Life Is On

Schneider
Electric

TeSys[®] T Motor Management System

Manage your critical processes
better, increase your productivity
and save energy



schneider-electric.us/tesyst

Advanced motor management and protection for your business

The TeSys T advanced motor monitoring, control, and protection system is designed to provide top performance, efficiency, and connectivity, fulfilling the most demanding needs



High performance

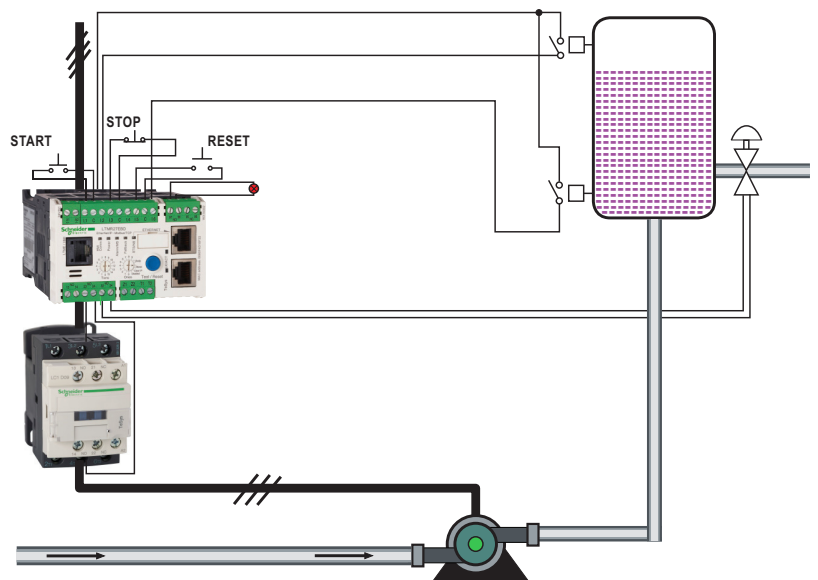
TeSys™ T covers all load monitoring and protection needs, from feeders to critical process automation. Your equipment is protected, while advanced diagnostics, statistics, and alarms help you anticipate unexpected production halts and minimize downtime. TeSys T is compact and a natural fit for control panels with IEC or NEMA standards. In addition, the system's connectivity and access to real-time data provide key information so you can enhance the operation and safety of your process while improving efficiency.

Proven solutions and support

The Schneider Electric™ library of tested, validated, documented architecture (TVDA) solutions reduces integration and commissioning time. We also support the whole project life cycle with network architectures, wiring and design guides, and more. Contact our expert at TeSys_US@schneider-electric.com.

Key features and benefits

- Advanced motor protection from basic to mission-critical applications up to 810A
- Reduce operating costs and downtime with advanced diagnostics and statistics
- Advance notice of potential issues through intuitive pre-fault alarming reduces downtime
- Built-in current transformer up to 100A
- Reduced panel size
- Maximum flexibility with expandable I/O and custom programmable logic
- Connectivity to your automation system through multiple industrial protocols



Features that help you do more

TeSys T detailed functionalities and possible configuration

Protection Functions

- Thermal overload
- Phase imbalance and phase overloads
- Thermal motor protection via temperature probes
- Phase reversal
- Ground fault detection
- Long start and Jam protection
- Load shedding
- Load fluctuations (current, voltage, power)
- Variations of Cos (power factor)

Metering Functions

- Phase and average Current
- Line to Line and average Voltage
- Motor temperature
- Ground Current
- Active & Reactive Power
- Active & Reactive energy
- Power factor
- Frequency

Statistical and Diagnostic Functions

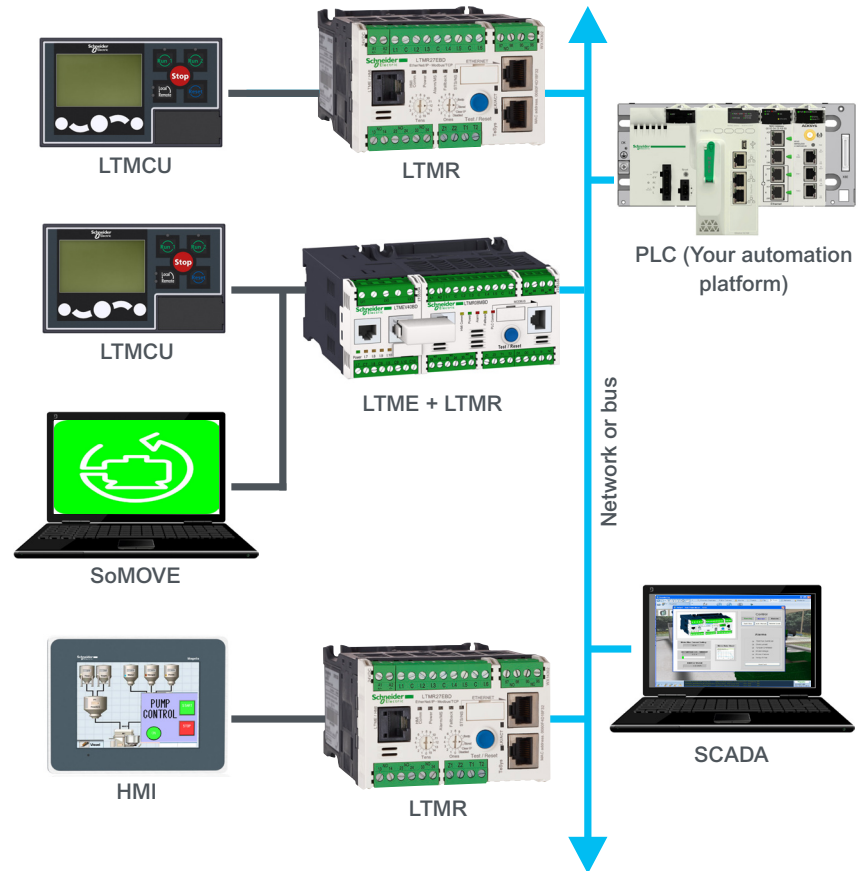
- History of the last five detected faults
- Motor statistics
- Controller operations
- Warning of potential faults

Communication

TeSys T is a flexible motor management system that supports five major communication protocols Modbus serial, Profibus®, CANopen®, DeviceNet™, Modbus TCP/IP, EtherNet/IP.

These communication protocols allow the TeSys T controller to integrate seamlessly into your automation system.

Contact our expert at TeSys_US@schneider-electric.com



Motor Control Functions

A motor managed by a TeSys T controller can be controlled:

- Locally, using logic inputs present of the product, or via the human machine interface (HMI)
- Remotely via the network

Ten predefined motor control modes are incorporated into the controller (two or three-wire):

- Overload mode: Monitoring of motors whose control is not managed by the controller
- Independent mode: Starting of full voltage non-reversing motors
- Reverser mode: Starting of full voltage reversing motors
- Two-step mode: Two-step starting of motors (star-delta by auto transformer and by resistor)
- Two-speed mode: Two-speed starting of motors (Dahlander, pole changer)

A Custom logic mode is available allowing for user created specific control schemes.

Custom Logic has the basic functions of a small programmable logic controller (PLC). Programming can be done in structured text mode or in function block diagrams through SoMove. To ensure consistency, the same software used to commission TeSys T controller, is used for custom logic programming.



Introducing Modbus TCP and EtherNet/IP for reliable control

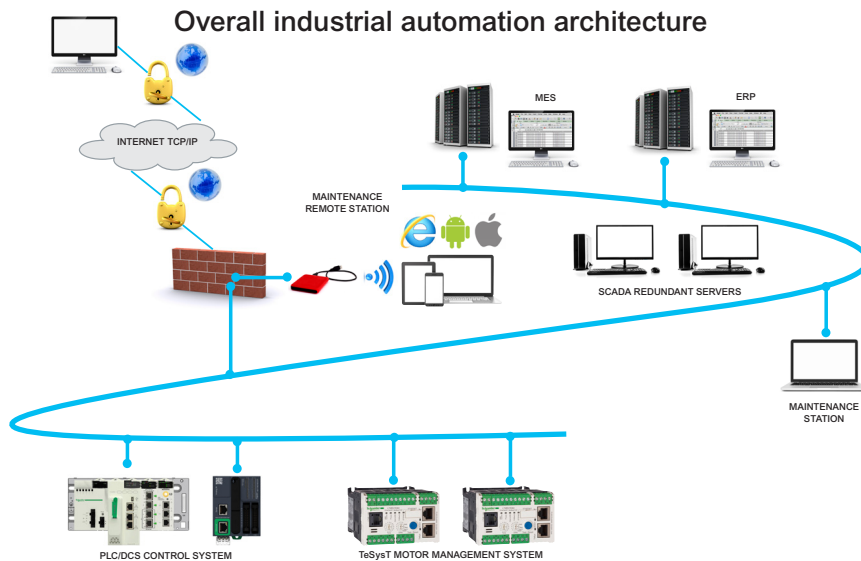
TeSys T now combines industry-standard Modbus TCP and EtherNet/IP protocols into one package.

New connectivity options bring new advantages

Ethernet is the perfect choice for fast and failure-resistant connectivity in industrial control networks. EtherNet/IP enables easier integration of the TeSys T Motor Management System with any PLC, SCADA, or DCS controller package, while providing maximum speed, performance, and reliability during both startup and operation.

TeSys T with Modbus TCP and EtherNet/IP gives you:

- Fast integration: Significantly reduced configuration and testing time due to standard device profiles, preconfigured connections, and integration with both Schneider Electric and third-party PLC, SCADA, and DCS systems
- Real-time exchange: Enhanced bandwidth, Quality-of-Service message priority, and built-in java-free web pages support data access, control, and other functions
- Superior reliability: Rapid Spanning Tree Protocol (RSTP) for fast failure recovery, broadcast storm protection to prevent oversaturation of available network bandwidth
- Dual Ethernet ports: Fast 100 Mbps peer-to-peer communication, simple daisy-chain connections, and support for redundant architectures
- Fast device replacement (FDR) allows to replace the device quickly with automatic download of configuration



TeSys T Controller



Reference

LTM R	100	E	BD
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Current Range	0.4 - 8 A	08
	1.35 - 27 A	27
	5 - 100 A	100

Network Protocol	CAN Open	C
	DeviceNet	D
	Ethernet	E
	Modbus	M
	Profibus DP	P

Control Voltage	24 V DC	BD
	100 . . . 240V AC	FM

6 digital inputs/4 relays output
1 input for external ground current sensor
1 input for motor temperature sensor



TeSys T
Full and Flexible
Intelligent Motor
Management System



TeSys T Accessories

TeSys T Expansion Module^{1,2}



Control Voltage	Reference
24 V DC	LTM EV40BD
100..240 V AC	LTM EV40FM

¹ Required for Voltage and Power measurement
² 4 digital inputs

Connector for Expansion



Length (m)	Reference
0.04	LTMCC004 ³
0.3	LTM9CEXP03

³ Sold in lots of 6

Operator Control Display



Description	Reference
Operator Control Display	LTM CU
Operator Control Display with configuration backup	LTM CUF

Controller to Display Cable



Length (m)	Reference
1.0	LTM9CU10
3.0	LTM9CU30

Current Transformers⁴

Primary [A]	Secondary [A]	Reference
100	1	LT6 CT1001
200	1	LT6 CT2001
400	1	LT6 CT4001
800	1	LT6 CT8001

⁴ To be used with controller LTM 8 ***

Ground Fault CT's

Primary [A]	Internal Ø "d" [mm]	Reference
65	30	50437
85	50	50438
160	80	50439
250	120	50440
400	200	50441
630	300	50442

Life Is  n | **Schneider**
 **Electric**

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