Start smart. Run smart.
With TeSys motor controls.

Stay smart with the world’s best-selling motor control solutions from Schneider Electric, the inventor of the world’s first contactor.

se.com/tesys
Our comprehensive range of TeSys solutions makes us a single-source provider of motor controls, allowing OEMs to increase machine efficiency while meeting their customers’ demands for greater machine productivity, reduced machine downtime, and improved maintenance decision-making. You can trust TeSys contactors, circuit breakers, relays, and switches for unmatched reliability and complete compatibility with international standards. You can count on Schneider Electric to provide robust support for all your motor control needs.

Stay smart

Our TeSys GV solution was introduced in the 1980s. With an integrated short circuit and extended protection against thermal overload and phase loss, TeSys GV provides consistent performance, enhanced safety and uptime, cost savings, and greater functionality.

In addition, TeSys GV combines with the biggest-selling contactor in the world, the TeSys D range, to offer a complete motor control solution for everything from simple machines to complex motor control centers.

Recent game-changing products from Schneider Electric include TeSys island, a ground breaking digital multifunctional load management solution, designed to switch, protect, and manage motors and other electrical loads up to 80 Amps. TeSys D Green contactors, a more sustainable and efficient than electro-mechanical contactors, thanks to an innovative electronic coil that reduces energy use by as much as 80 percent when the contactor is sealed. The new TeSys GV4 marks another breakthrough, combining the simplicity of standard motor controls with the advanced protection of intelligent, digital designs.

Learn how these offers and the entire TeSys range allow you to commission quicker and install more efficiently while providing your customers with a modern digital offer.

Give your operations an edge by turning to Schneider Electric, the leader in motor control solutions for nearly a century.
The best of both worlds

By bringing two market leaders for the IEC and UL market, Schneider Electric is able to deliver a complete line of solutions.

<table>
<thead>
<tr>
<th>Core Offer IEC</th>
<th>Core Offer UL</th>
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<tbody>
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<td>Short Circuit</td>
<td>TeSys GV</td>
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<td>Switching</td>
<td>TeSys K, D, F</td>
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<td>Load Protection</td>
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<td>Motor Management</td>
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<td>Tesys island</td>
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<th>PowerPact</th>
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<td>TeSys N</td>
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<td></td>
<td>Type S</td>
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<td></td>
<td>Motorlogic</td>
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<tr>
<td></td>
<td>TeSys N Starter</td>
</tr>
<tr>
<td></td>
<td>Type S, Combo</td>
</tr>
<tr>
<td></td>
<td>Tesys island</td>
</tr>
</tbody>
</table>

se.com/tesys
OEM and Panel Builder
Maximize your business and machine performance

Boost your productivity:
• Easy selection, thanks to the new EcoStruxure™ Motor Control Configurator
• CAD support
• Space saving solutions
• Installation and wiring time

Improve the safety of your machine:
• Integrated safety features
• Clear visualization of components of the safety chain
• Compliance with international standards

Adapt your machines to any situation:
• Wide-range settings
• Multistandard offer IEC/UL/CSA/CCC

With EcoStruxure Motor Control Configurator build your complete motor control solution online for any application.

Choose the right products and accessories, then auto-generate the bill-of-materials.
Operators

Keep your plant in operation 24/7

Increase your productivity:
• Easy integration into automation thanks to standard field bus

Reduction of unplanned downtimes:
• High-quality and long-lasting products
• Alerts before failure
• Worldwide availability of spare parts
• Outstanding field service organization

Reduction of maintenance cost:
• High-quality and long-lasting products
• Fast and easy replacement

Reduction of energy bill:
• Low energy consumption
• Innovative products

Improve productivity
Reduction of unplanned downtimes
Reduction of maintenance costs
Reduction of the energy bill
Schneider Electric Motor Starter Solutions will lift your productivity to the next level

- Less space required: -57%
- Reduction of mounting and wiring time: -45%
- Reduction of energy consumption: -75%
- Downtime reduction: -70%
TeSys functional view

Everything you need for motor control

Short Circuit Protection

Switching

Overload Protection

Motor Management

TeSys GS
TeSys K, D, F
TeSys LRD
TeSys T
TeSys island

TeSys GVL
TeSys K, D, F
TeSys LRD
TeSys T
TeSys island

TeSys GV, ME or GVP
TeSys K, D, F
TeSys T
TeSys island

TeSys U
TeSys GV, L
Soft Starter ALTISTART family

TeSys GV, L
VSD ALTIVAR family

VSD LC1D.K

Capacitor bank
Discover TeSys

The most flexible and compact system on the market

- Short Circuit Protection with TeSys GV
- Switching with TeSys D
- Overload Protection with TeSys LRD

3 products

Space required: 100%

- Short Circuit Protection and Overload Protection with TeSys GV
- Switching with TeSys D

2 products

Space required: 72%

- All-in-One Starter TeSys U

1 product

Space required: 43%
Short Circuit Protection
TeSys: Protection against Short Circuits

Make the starter even smarter

<table>
<thead>
<tr>
<th>Protection</th>
<th>Magnetic Only</th>
<th>Thermal/Magnetic</th>
<th>Transformer</th>
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</thead>
<tbody>
<tr>
<td>GV2L</td>
<td>GV3L</td>
<td>GV4L</td>
<td>GV5P</td>
</tr>
<tr>
<td>GV4L</td>
<td>NSX</td>
<td>GV3P</td>
<td>GV6P</td>
</tr>
<tr>
<td>GV2ME</td>
<td>GV2P</td>
<td>GV4P</td>
<td>GV2RT</td>
</tr>
<tr>
<td>GV5P</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Rated Current

- GV2L: 0.4A → 32A
- GV3L: 0.4A → 32A
- GV4L: 0.4A → 32A
- NSX: 0.8A → 115A
- GV2ME: 0.4A → 32A
- GV2P: 0.4A → 32A
- GV3P: 0.4A → 32A
- GV4P: 0.4A → 32A
- GV5P: 0.25A → 18A
- GV6P: 0.25A → 18A
- GV2RT: 0.25A → 18A

Short Circuit Protection

- GV2L: ✓ ✓ ✓ ✓ ✓
- GV3L: ✓ ✓ ✓ ✓ ✓
- GV4L: ✓ ✓ ✓ ✓ ✓
- NSX: ✓ ✓ ✓ ✓ ✓
- GV2ME: ✓ ✓ ✓ ✓ ✓
- GV2P: ✓ ✓ ✓ ✓ ✓
- GV3P: ✓ ✓ ✓ ✓ ✓
- GV4P: ✓ ✓ ✓ ✓ ✓
- GV5P: ✓ ✓ ✓ ✓ ✓
- GV6P: ✓ ✓ ✓ ✓ ✓
- GV2RT: ✓ ✓ ✓ ✓ ✓

Overload Protection

- GV2L: ✗ ✗ ✗ ✗ ✗
- GV3L: ✗ ✗ ✗ ✗ ✗
- GV4L: ✗ ✗ ✗ ✗ ✗
- NSX: ✗ ✗ ✗ ✗ ✗
- GV2ME: ✗ ✗ ✗ ✗ ✗
- GV2P: ✗ ✗ ✗ ✗ ✗
- GV3P: ✗ ✗ ✗ ✗ ✗
- GV4P: ✗ ✗ ✗ ✗ ✗
- GV5P: ✗ ✗ ✗ ✗ ✗
- GV6P: ✗ ✗ ✗ ✗ ✗
- GV2RT: ✗ ✗ ✗ ✗ ✗
TeSys GV2ME
Magnetic and thermal protection

A compact size with 45mm wide

100,000 cycles of electrical durability (AC-3 400V) and 100,000 C.O

IE4 motor compliant

Full range of accessories available with minimum change to the final product dimensions

Worldwide approvals and certifications for all markets

Robust
Up to 2000m
Up to 60°C
Duty Class: 25 C.O./h

Additional auxiliary contact can be added in house

Push button

In-house lock mechanism

Breaking Capacity
Up to 100kA (Icu en 400V)

3 different connection types

Sealable thermal overload setting

Screw
Spring
Lugs-ring
TeSys GV3
A stronger, safer and long-term connection

Thermal-magnetic circuit-breakers GV3P and magnetic circuit-breakers GV3L up to 80A

- High Breaking Capacity up to 100kA/400V
- Safe and long-lasting connections thanks to
- Compact, only 55mm width
- Direct mounting on a contactor, no adaptor needed!
- Unlimited possibility, thanks to innovative accessories

Flexible – Vertical and Horizontal Load feeder

Reversing Starter (vertically)
Reversing Starter (horizontally)
TeSys GV4
A full range of motor circuit breakers

Up to 115A/55kW

- Advanced protections: ground fault, jam, long start
- Pre-alarms and automatic reset
- EverLink™ power connector
- Smart, externally visible auxiliaries
- Ergonomic rotary handles: direct, extended and side

Ergonomic rotary handles ensure quick and simple installation
Patented creep compensation maintains safe and reliable power connection
Smartphone and NFC allow easy commissioning and maintenance
TeSys GV5P & GV6P

Reliable design, advanced protection and robust performance

Up to 500A/250kW

Equipped with Micrologic trip units with thermal-magnetic protections

Complies to international standards

Wide range of common accessories and auxiliaries

GV5P
- Ratings: 150A & 220A
- 2 breaking capacities: 36kA & 70kA @ 400/415V
- Replaces existing GV7 with same foot print
- Micrologic 2.2M trip unit with thermal-magnetic protections

GV6P
- Ratings: 320A & 500A
- 2 breaking capacities: 36kA & 70kA @ 400/415V
- New range in extension to GV5
- Micrologic 2.3M trip unit with thermal-magnetic protections
Switching

<table>
<thead>
<tr>
<th>TeSys K</th>
<th>TeSys D</th>
<th>TeSys F</th>
<th>TeSys F 1200 ... 2600</th>
</tr>
</thead>
<tbody>
<tr>
<td>The economic line for motors up to 7.5kW/16A</td>
<td>The industrial standard for motors up to 75kW/150A</td>
<td>The robust line for large motors up to 450kW/800A</td>
<td>For demanding power switching applications up to 2600A (AC1)</td>
</tr>
</tbody>
</table>

**IEC**

- \( P_{(AC3)} \)
  - 0 \( \rightarrow \) 7.5kW
  - 16A

- \( I_{(AC3)} \)
  - 0 \( \rightarrow \) 75kW
  - 150A

**NEMA**

- **TeSys N**
  - Combining NEMA Robustness and IEC Compactness

- **Square D Type S**
  - The standard in the Industry for over 50 years

- Nema Size
  - 00 \( \rightarrow \) 7
TeSys D Green
A natural part of your environmental strategy

TeSys D Green set again the energy standard in the library

-80%
Up to 80% less energy consumption than a traditional electromechanical motor starter

10 times less references
Only 3 references to cover the complete voltage range for AC and DC

-35%
Highest currents in smallest size, e.g. 80A in 55mm instead of 84mm

PLC Compatible
Direct connection to a PLC without the need for an interposing relay

SEMIF47
High uptime thanks to wide band coil with high resistance to voltage surges/SEMIF47 conform

Complete range up to 80A/37kW:
09-12-18A
25-32-38A
40-50-65-80A
### Thermal Overload Relay

<table>
<thead>
<tr>
<th>TeSys LR2K</th>
<th>TeSys LRD</th>
<th>TeSys LR9D</th>
<th>TeSys LR9F</th>
</tr>
</thead>
<tbody>
<tr>
<td>The economic line for motors up to 7.5kW/16A direct on TeSys K contactor</td>
<td>The industrial standard for motors up to 75kW/140A direct on TeSys D contactor</td>
<td>The innovative line for motors up to 75kW/150A direct on TeSys D contactor</td>
<td>For large motors up to 315kW/630A direct on TeSys F contactor</td>
</tr>
</tbody>
</table>

#### IEC

<table>
<thead>
<tr>
<th>Protection</th>
<th>Protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class: 10</td>
<td>Class: 10, 20*1</td>
</tr>
<tr>
<td>0, 16</td>
<td>0, 16</td>
</tr>
<tr>
<td>...7.5kW16A</td>
<td>...75kW140A</td>
</tr>
</tbody>
</table>

#### NEMA

<table>
<thead>
<tr>
<th>Protection</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Square D Melting Alloy</td>
<td>Square D Motorlogic</td>
</tr>
<tr>
<td>The standard in the Industry for over 50 years up to NEMA size 6</td>
<td>The electronic solution for starters up to NEMA size 7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Protection</th>
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</thead>
<tbody>
<tr>
<td>Size 00</td>
<td>Size 00</td>
</tr>
<tr>
<td>Size 6</td>
<td>Size 7</td>
</tr>
</tbody>
</table>

*1 Class 20 up to 80A
TeSys LR9D
Electronic Overload Relay

Providing motor safety tailored to your needs!

5:1 adjustment range makes new relays a natural choice for a wide range of applications, from 0.1A to 110A

Selectable trip class (5, 10, 20, 30) lets you set the desired level of protection

Self-powering eliminates the need for external power supply

Close-couple configuration for reduced installation time

Unique – Only 5 versions up to 110A

Directly mountable on TeSys D

Stand alone
## Motor Management

### All-in-One Starter TeSys U

- **TeSys U for standard applications**
  - The world’s most compact motor starter for all your needs in standard applications up to 32A

- **TeSys U for high-feature applications**
  - The most compact motor starter combined with the latest feature for high-end Motor Management

### Motor Management System

- **TeSys T**
  - The Flexible Motor Management System for all applications and motors up to 830A (AC3)

- **TeSys island**
  - Designed to switch, protect, and manage motors and other electrical loads up to 80 Amps (AC3) in an electrical control panel

![TeSys U for standard applications](image1)
![TeSys U for high-feature applications](image2)
![TeSys T](image3)
![TeSys island](image4)
TeSys U
All-in-One Motor Starter

Lift your productivity to the next level

Efficient
Safe up to 45% of the time for installation and wiring

Compact
Save up to 57% of space in the cabinet, reversing Starter in 45mm width!

Flexible
Wire the starter completely in the workshop, define the Motor on site with plugin of the control unit

Secure
Mirror contact as standard

Advanced
Advanced Motor Management with function modules to reduce unplanned downtime

It’s so easy! – Only 1 base plate and 4 control units up to 32A
TeSys island
Digital load management system

First object-oriented load management system to lift your productivity to the next level.

Highest power, flexibility, and efficiency. For digital solutions up to 80A / 37kW / 40hp with up to 20 modules. No auxiliary wiring necessary thanks to internal AUX bus

Efficient

Digital

Secure

Flexible

Select, program, and configure with TeSys Avatars

Highest cybersecurity and safety levels
Achilles Level 2

For EcoStruxure and third-party automation solutions. Integrated into engineering and programming environments of major automation players. Coverage of major industrial fieldbus systems for machine automation: Ethernet/IP and Modbus TCP
Cabinet Optimization

Schneider Electric, the competent partner!

Find 99% of components for your cabinets

1. Incoming protection and switching
2. Power distribution systems
3. Power supplied and transformers
4. Circuit and Load protection
5. Motor Control
6. Motion and Drives
7. Relays
8. Machine Safety
9. Programmable controllers
10. Interfaces and Inputs/Outputs
11. Operator dialog
12. Enclosures
13. Thermal management
14. Power and Energy – Monitoring and Control

https://www.schneider-electric.com/en/partners/panel-builders/control-panel.jsp