



# 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](https://se.com/tesys)

Life Is On

**Schneider**  
Electric



# Schneider Electric, the leader in motor control solutions

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.



	Core Offer IEC	Core Offer UL
 Short Circuit	TeSys GV	PowerPact
 Switching	TeSys K, D, F	TeSys N Type S
 Load Protection	TeSys LRD	Motorlogic
 Motor Management	TeSys U, T Tesys island	TeSys N Starter Type S, Combo Tesys island



# 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



Try EcoStruxure™ Motor Control Configurator now

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



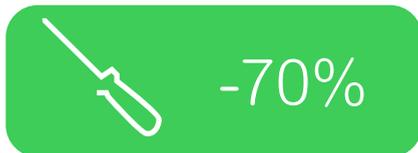
Less space required



Reduction of mounting and wiring time



Reduction of energy consumption

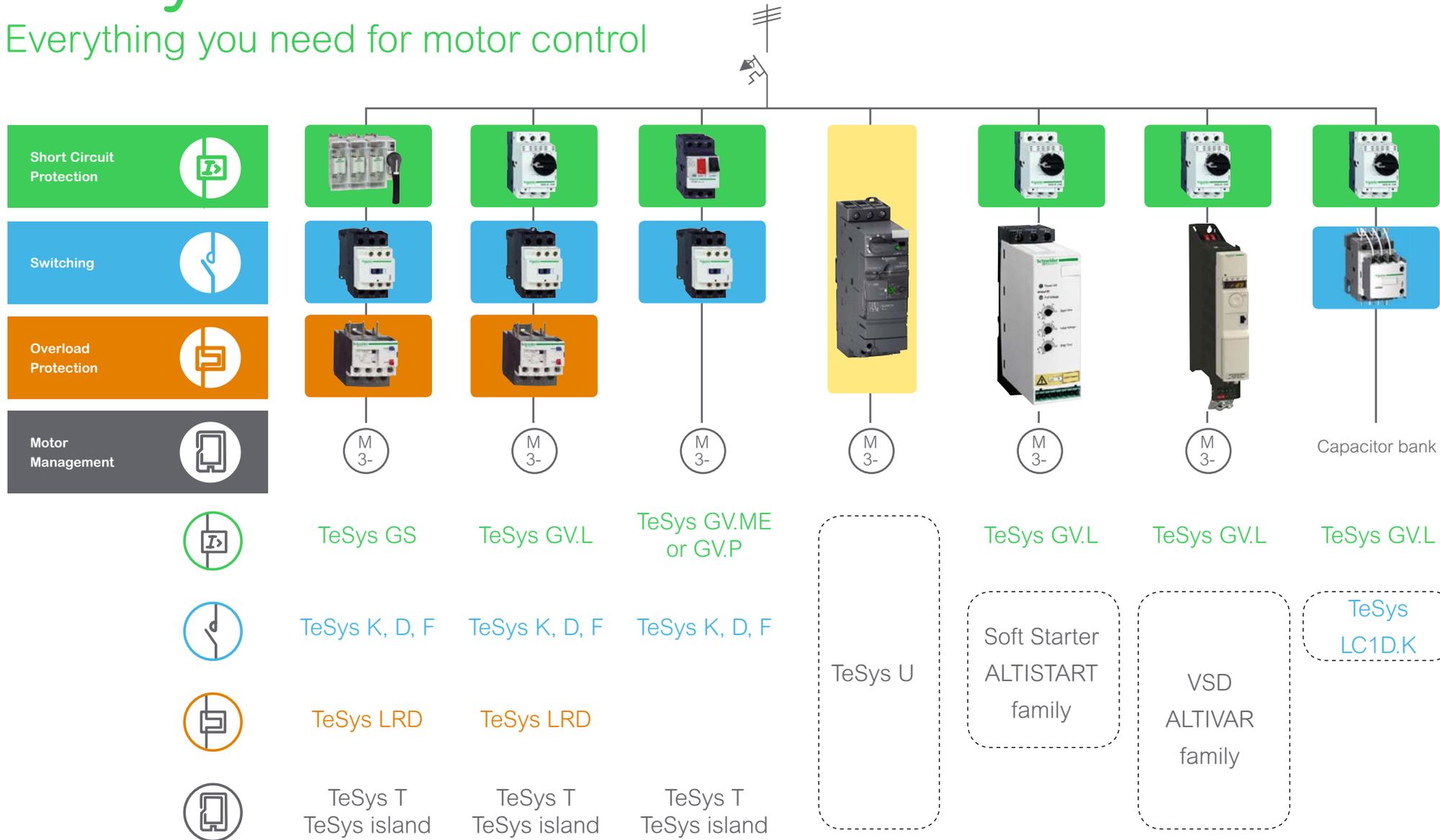


Downtime reduction



# TeSys functional view

Everything you need for motor control



# Discover TeSys

The most flexible and compact system on the market

	3 products	2 products	1 product
<b>Short Circuit Protection</b> 	Short Circuit Protection with <b>TeSys GV</b> 	Short Circuit Protection and <b>Overload Protection</b> with <b>TeSys GV</b> 	 <b>All-in-One Starter TeSys U</b>
<b>Switching</b> 	Switching with <b>TeSys D</b> 	Switching with <b>TeSys D</b> 	
<b>Overload Protection</b> 	Overload Protection with <b>TeSys LRD</b> 		
	Space required: 100%	Space required: 72%	Space required: 43%

# Short Circuit Protection

## TeSys: Protection against Short Circuits

Make the starter even smarter

Protection	Magnetic Only				Thermal/Magnetic						Transformer
											
	GV2L	GV3L	GV4L	NSX	GV2ME	GV2P	GV3P	GV4P	GV5P	GV6P	GV2RT
<b>Rated Current</b> 	0.4A — 32A 9A — 80A 0.8A — 115A 1.5A — 500A				0.4A — 32A 9A — 80A 0.8A — 115A 70A — 220A 160A — 500A						0.25A — 18A
<b>Short Circuit Protection</b> 	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
<b>Overload Protection</b> 	✗	✗	✗	✗	✓	✓	✓	✓	✓	✓	✓

# 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



Sealable thermal overload setting

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

3 different connection types



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

Up to 100kA

High Breaking Capacity  
up to 100kA/400V



Safe and long-lasting  
connections thanks to



→ ← 55mm

Compact,  
only 55mm width

Direct

Direct mounting on a contactor,  
no adaptor needed!

Z-Adaptor

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



Start smart

Ergonomic rotary handles ensure quick and simple installation



Run smart

Patented creep compensation maintains safe and reliable power connection



Stay smart

Smartphone and NFC allow easy commissioning and maintenance

- 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



# 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

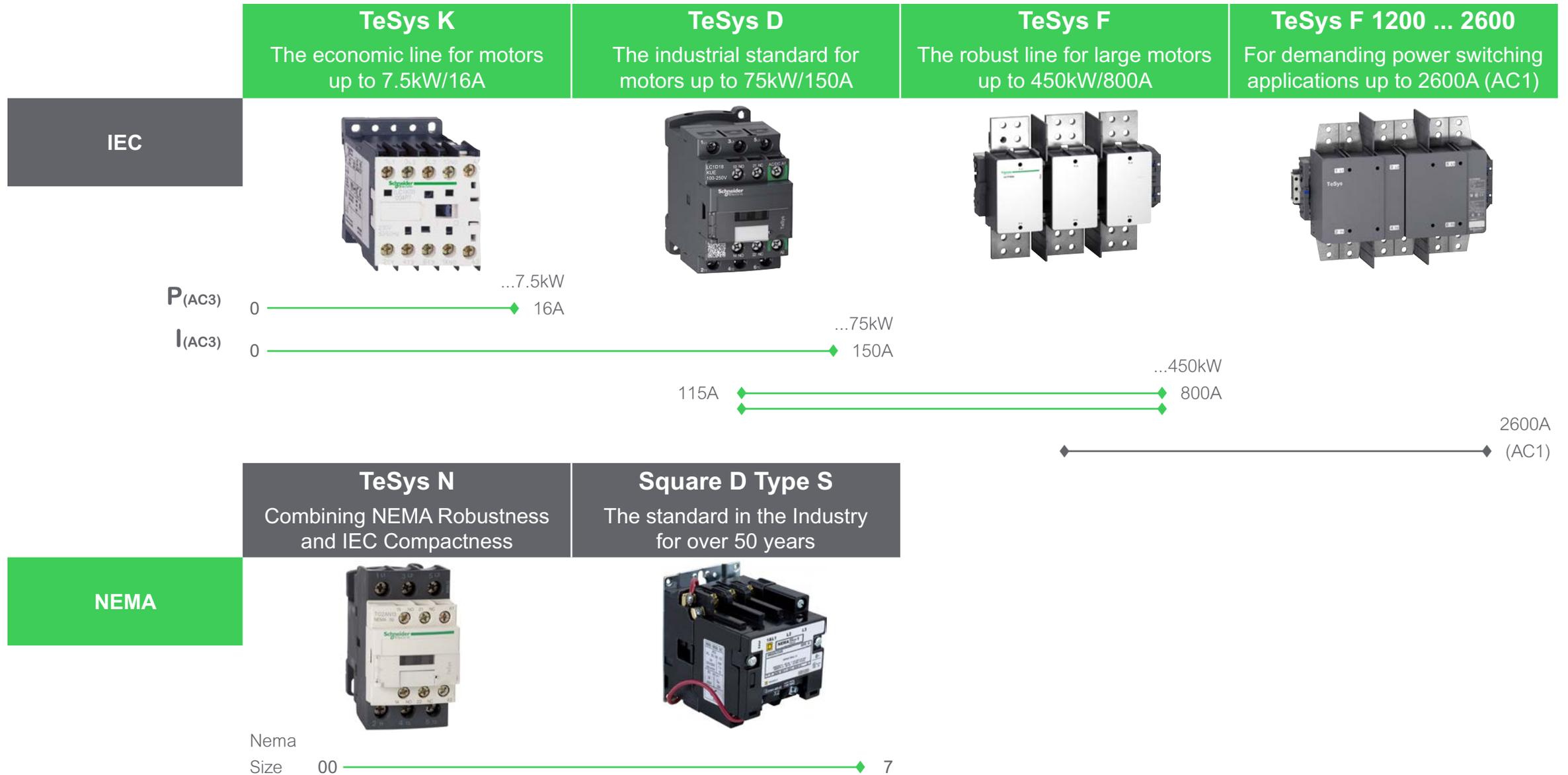
- Ratings: 150A & 220A
- 2 breaking capacities: 36kA & 70kA @ 400/415V
- Replaces existing GV7 with same foot print
- Micrologic 2.2M trip unit with thermal-magnetic protections



## 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



# 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



# Protection

		Thermal Overload Relay		Electronic Overload Relay	
		<b>TeSys LR2K</b> The economic line for motors up to 7.5kW/16A direct on TeSys K contactor	<b>TeSys LRD</b> The industrial standard for motors up to 75kW/140A direct on TeSys D contactor	<b>TeSys LR9D</b> The innovative line for motors up to 75kW/150A direct on TeSys D contactor	<b>TeSys LR9F</b> For large motors up to 315kW/630A direct on TeSys F contactor
IEC		 Class: 10 0, 16 ————— ◆ ...7.5kW 16A 0, 16 ————— ◆ ...75kW 140A	 Class: 10, 20* *1 Class 20 up to 80A ...75kW 140A	 Class: 5, 10, 20, 30 (selectable) 0, 16 ————— ◆ ...75kW 32A	 Class: 10, 20 ...315kW 630A
		<b>Thermal Overload Relay</b> <b>Square D Melting Alloy</b> The standard in the Industry for over 50 years up to NEMA size 6	<b>Electronic Overload Relay</b> <b>Square D Motorlogic</b> The electronic solution for starters up to NEMA size 7		
NEMA		 Nema Size 00 ————— ◆ 6	 Nema Size 00 ————— ◆ 7		

# 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



Motor Management

All-in-One Starter TeSys U		Motor Management System	
<b>TeSys U for standard applications</b> The world's most compact motor starter for all your needs in standard applications up to 32A	<b>TeSys U for high-feature applications</b> The most compact motor starter combined with the latest feature for high-end Motor Management	<b>TeSys T</b> The Flexible Motor Management System for all applications and motors up to 830A (AC3)	<b>TeSys island</b> Designed to switch, protect, and manage motors and other electrical loads up to 80 Amps (AC3) in an electrical control panel



# TeSys U

## All-in-One Motor Starter

Lift your productivity to the next level

Efficient

Save 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

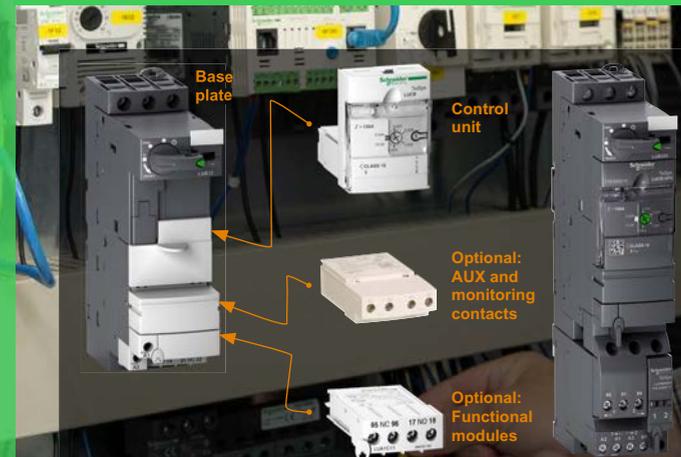
Secure

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.

Efficient

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

Digital

Select, program, and configure with TeSys Avatars

Secure

Highest cybersecurity and safety levels  
Achilles Level 2

Flexible

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

Complete range up to 80A/37kW



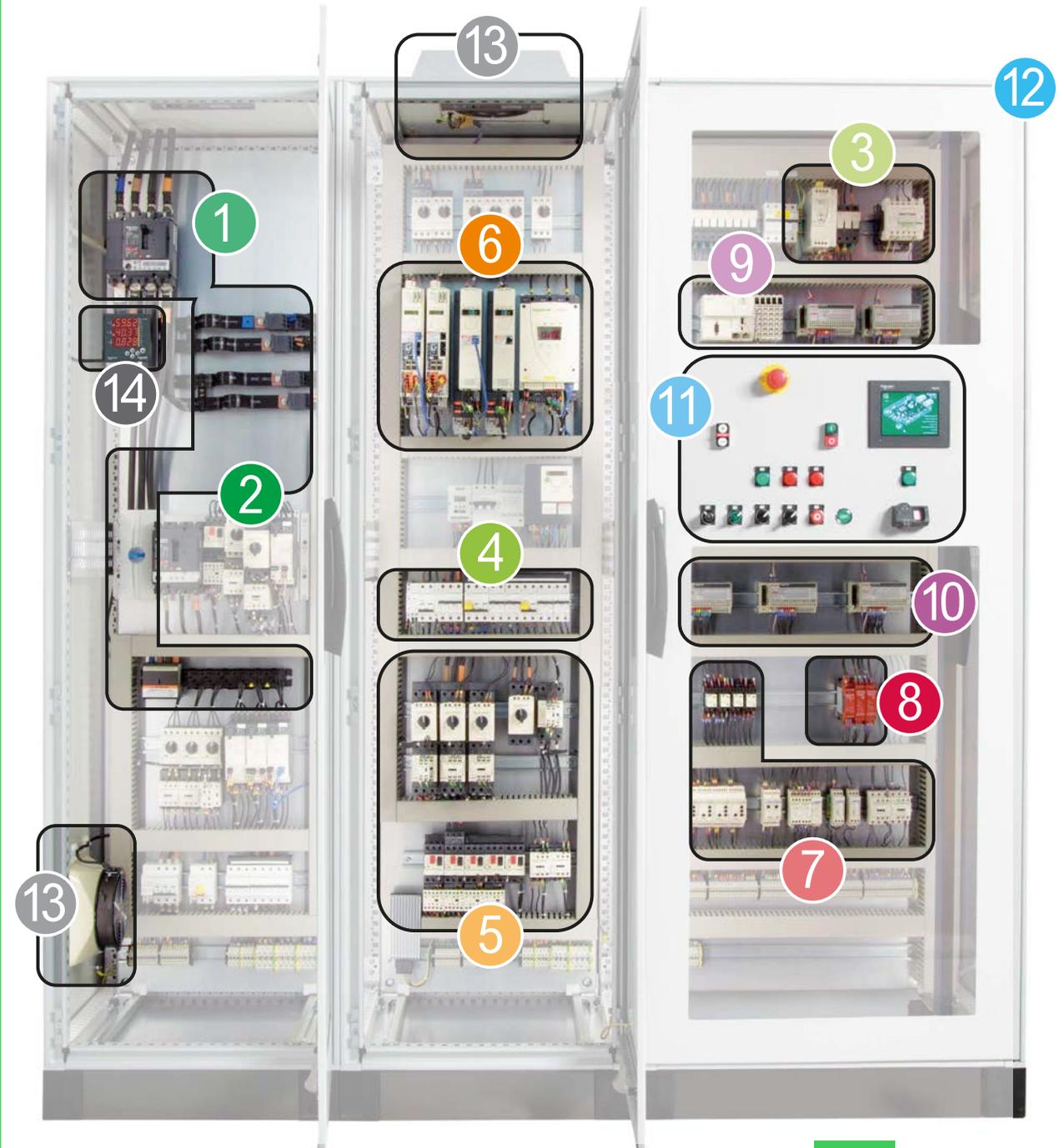
# Cabinet Optimization

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>



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 Electric