Telemecanique®
TeSys® The New D-Line

The world's most popular contactors are now the world's easiest to wire and install.

a brand of Schneider Electric

Telemecanique

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TeSys® *The New D-Line*

To harness the power to run machine control systems smoothly and safely, Schneider Electric and the Telemecanique® brand bring you the latest in motor control technology. TeSys, the new D-Line family of contactors and thermal overload relays, allows you to work faster with less risk while responding to a demanding marketplace.

Easy Integration

With more than one million contactors sold in the United States each year, Schneider Electric has used its industry expertise to design a new line of contactors that is completely compatible with former generations of the product. And new features also allow integration into your automated systems.

A New Connection

Our time-tested products now offer the Quickfit technology, which permits wire and tool free mounting assembly. State-of-the-art connections allow you to reduce installation time up to 50 percent and wiring expense up to 80 percent.

The Power is Yours

The high performance and sleek design of the new D-Line gives you the power to save time and money. Plus, with new security features including a unique color-coding system (white terminals indicate control circuit connections and black terminals represent power connections), the D-Line gives you greater command of your motor control system.

With nearly two centuries of combined electrical equipment experience, Schneider Electric, through its Square D® and Telemecanique brands, offers one of the most reliable and innovative lines of contactors and thermal overload relays on the market today.

controlled
power

TeSys® *The New D-Line*

D-Line (AC or DC coils) up to 32A (AC3). These contactors are compatible with all front-mounted add-on assemblies.

The new D-Line contactor range is designed to integrate seamlessly into automation systems and DC control circuits. The D-Line contactor range:

- Has similar dimensions to an AC contactor.
- Includes one NO and one NC auxiliary contact as standard on each contactor.
- Provides wide coil operating range (70 to 125% of nominal DC voltage).
  - Complies with automation system standards
  - Can use power from back-up sources (e.g., generators and batteries, etc.)
- Includes built-in surge suppression by bi-directional diode.
- Provides low noise-level interference on contact closure.
- Provides excellent resistance to shock and vibration.

Zelio logic module

Contact reliability:
All auxiliary self-cleaning serrated contacts provide reliable signals to a PLC or dedicated electronic control system.

perfect compatibility

No need for interface modules **No need for ventilation fans** **Smaller power-supply unit** **Improved availability**

The 4.7 W, low-consumption DC contactor contains two integrated auxiliary contacts. These contactors can take one front-mounted, two-pole add-on block.

Control relays

Complete range of TeSys D-Line control relays (NEMA A600 current ratings) with five mechanically linked, sliding, serrated contacts that comply with IEC machine safety standard EN 50011.

Phaseo DC power supply

Benefits of using low-consumption D-Line contactors:

- Temperature rise is one-third that of an AC coil.
  - – Allows for compact, electrical equipment
  - – Eliminates forced cabinet ventilation
  - – Increases reliability over time
- Smaller power-supply unit.
- 100mA/24V contactors are directly controlled.
  - – By high-density PLC outputs
  - – By dedicated electronics
  - – Network communication modules are available
- Interfaces deleted.
  - – Offers simplified wiring
  - – Allows greater availability of equipment
- Long runs of wires can be used because line voltage drop effects are reduced.

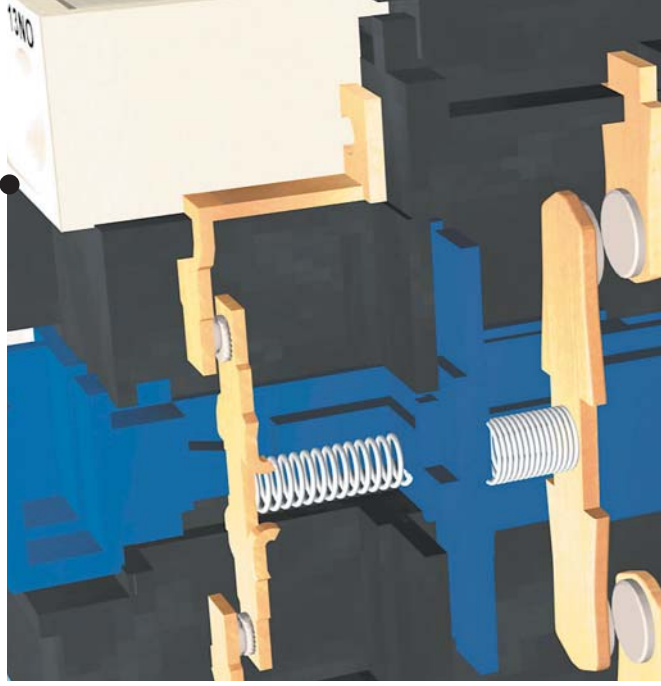
Easy selection Reduces stock Saves space

TeSys® *The New D-Line*

Schneider Electric's Telemecanique® brand has developed a range of up to 150A (AC3) and 200A (AC1) to meet your requirements.

- High-performance power contacts and protection components guarantee safe operation.
- IP 2 finger-safe terminals.
- Easy, risk-free connection with a color-coded system and wiring diagrams.
- A cover supplied with the contactor prevents manual movement of the contacts.
- Increased insulation distances between control and power for full compatibility with installations requiring very low control voltages.
- Motor starters can be upgraded easily:
  – Solid connections between accessories and associated devices ensure a secure fit.
  – The snap-on mounting system allows the replacement of a starter without interference to adjoining lines.

Complete product for safety circuits **Reinforced protection** **Easy risk-free wiring**



To make it easier to design machine safety circuits, each TeSys D-Line contactor has two integral auxiliary contacts: one NC mirror contact mechanically linked to the NO contact.

D-Line contactors and relays meet machine safety standards

Mirror auxiliary contact:

- Is mechanically linked to a power contact. NC auxiliary contact cannot be opened at the same time as a normally open power contact is closed (IEC 60947-4-1, project 17B/996/DC).

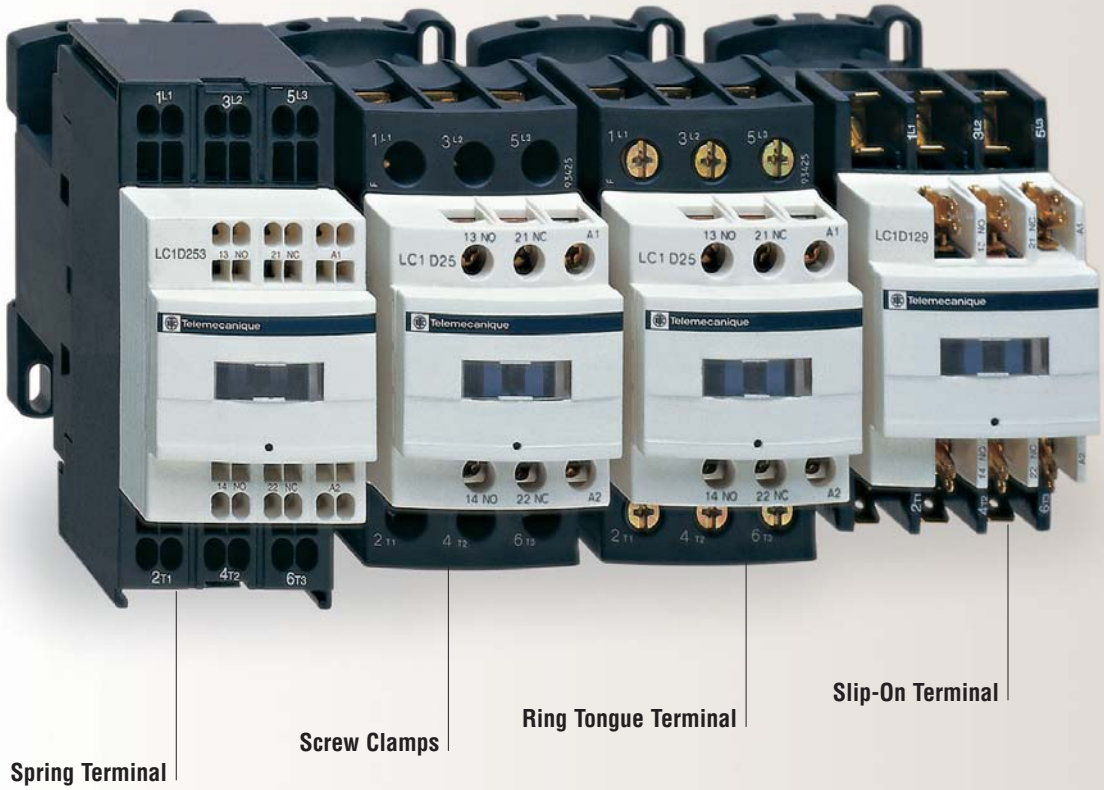
Mechanically linked auxiliary contacts:

- Combination of NO and NC auxiliary contacts are designed to make it impossible to close both contacts at the same time (IEC 60947-5-1).

Safety **first**

TeSys® *The New D-Line*

The Telemecanique® TeSys D-Line offers four connection solutions to meet all your requirements.



always **dependable**

Spring terminals

Eliminate the need for constant checking and retightening of screw-type terminals. Available on control and power terminals of all components in the TeSys range. Spring terminals offer:

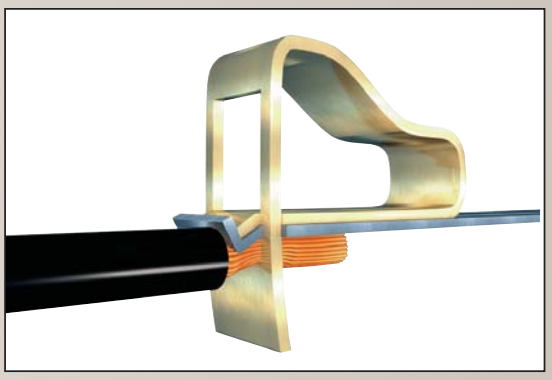
- Power up to 32A (AC3).
- More reliable wiring through the front connection.
- Two wires with different cross-sections that can be used on the same terminal.
- Automatic adaptation to all cable types.
- Finger-safe terminals (IP 2).
- An association with Quickfit technology for a no-wire, no-tool connection.

Screw clamps and connectors

Connect cables with or without end fittings:

- Components with screw clamps are fitted as standard up to 32A, and box lug connectors are fitted as standard from 40A to 150A.
- The same screwdriver can be used to tighten all control and power-screw clamps.

The spring maintains constant pressure, which provides a secure fit and prevents connections from overheating.



Spring terminals

- Cables with varied cross-sections can be connected simultaneously to the same screw-clamp terminals.

Screw clamps and connectors

Ring tongue terminals

Minimize connection faults caused by severe vibrations. Ring tongue terminals:

- Are available up to 32A.
- Are supplied with screws backed out and can be connected without removing the terminal touch protectors.
- Maintain cable in correct position.

Slip-on terminals

Quickly connect:

- For up to 18A.
- To equipment that is subject to constant vibrations.
- For single 1/4-inch or 2 x 1/8-inch tabs for control; 2 x 1/4-inch tabs for power.

Quickfit is an exclusive connection technology that doesn't require wires or tools. Using simple modules, this technology enables a configuration of any number of motor starters (for a total of 50A) to be assembled in three stages.

Quickfit technology has all of the advantages of spring-loaded terminals:

- Long-term, reliable connections.
- Error-free wiring.
- Shock and vibration resistant.

This module-based connection technology provides finger-safe protection. The Quickfit technology shortens maintenance operations and eliminates wiring errors.

Using the same technology, a load terminal block plugs into the contactor and provides a direct connection to motor cables and continuous grounding.

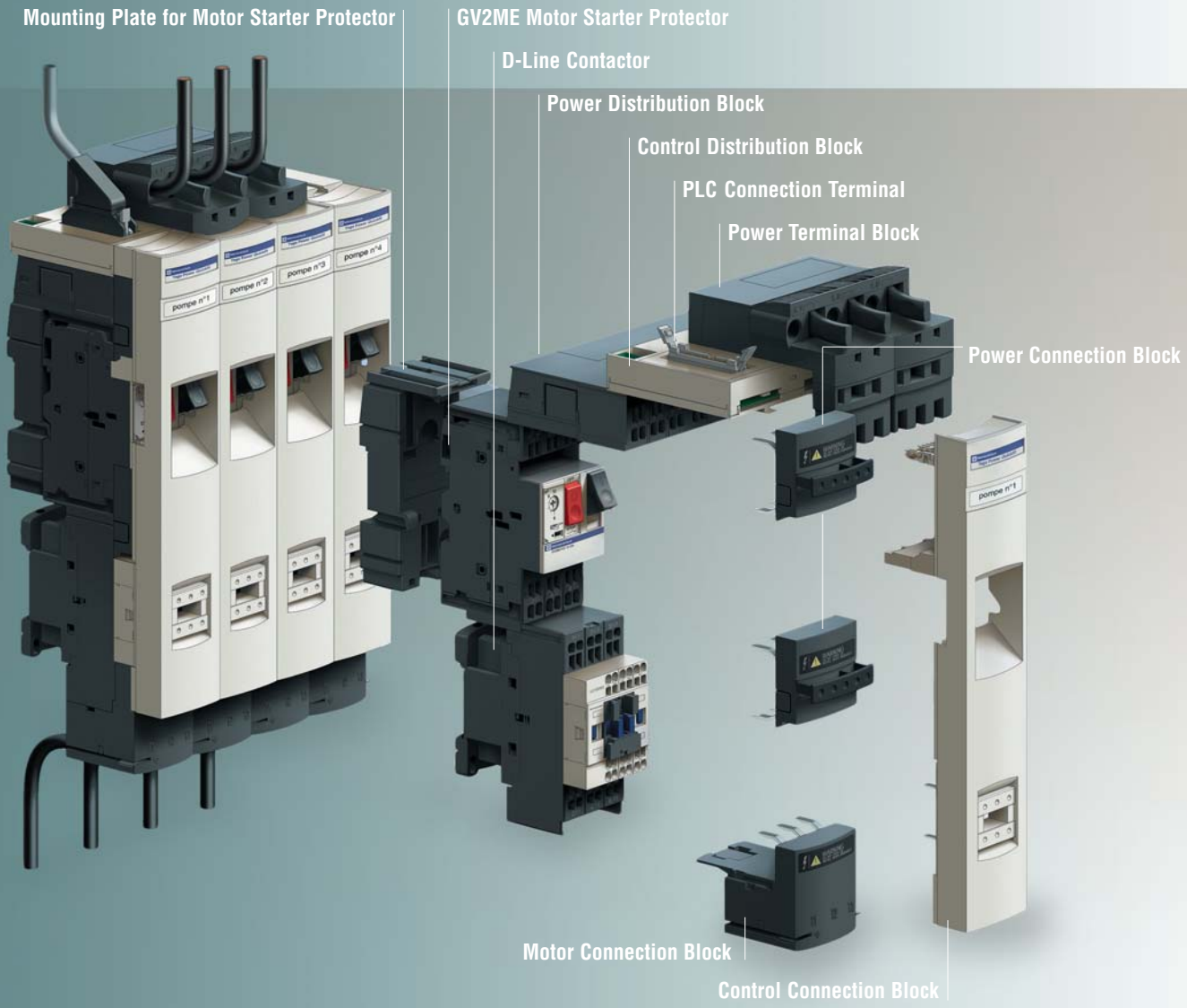
Configuring a system with multiple starters (up to 63A total) using 45-mm wide modules, each with one starter, guarantees flexibility and simplifies installation.

Two levels of premounting exist:

- Power components only, including:
  – Mechanical association of TeSys D-Line contactors and GV2 manual motor starters
  – Power connections of the motor starters using plug-in modules
- Power and control monitoring units.

Wire and tool free assembly of TeSys contactors and GV2 manual motor starters.

Quickfit
te



echnology

Flexible and easy to expand

TeSys® *The New D-Line*

Complete range up to 150A

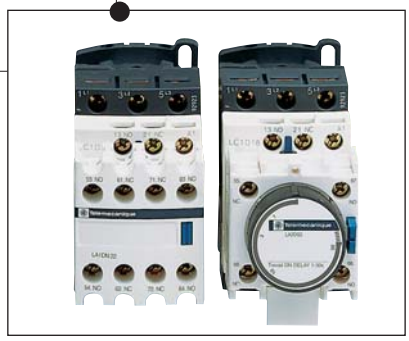
The TeSys D-Line contactors are renowned for their high quality. Their reliability, ruggedness and ergonomic design ensure optimum operation of installations.

Each contactor is fitted with a cover, preventing manual movement of contacts.

Clear identification and separated control and power circuits reduce wiring errors.

Each TeSys D-Line contactor has two standard, built-in auxiliary contacts (1 NO and 1 NC; isolated), simplifying selection and reducing inventory maintenance.

Front- and side-mounted auxiliary contact blocks allow for extended logic control operations.



TeSys D-Line contactors meet a wide range of needs and applications

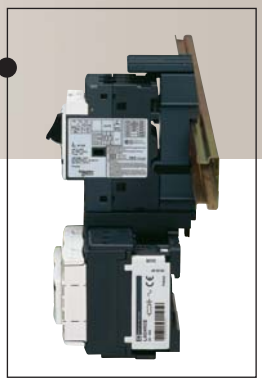
- AC, DC and low-consumption DC control circuits.
- Can be used for resistive heating, lighting or inductive motor loads up to 200A (resistive)/150A (inductive).

total
quality

Continuity guaranteed

32A = 45 mm

TeSys® D-Line contactors operate at ambient temperatures up to 60° C without being derated, so they cover the full range of applications.



A compact range up to 32A

For ratings covering the most common motor capacities, the range provides:

- Compact electrical units with a standard width of 45 mm for contactors and 90 mm for reversing contactors.
- A reversing contactor that is quick and easy to assemble by combining two standard contactors and a mechanical interlock inside the contactor casing. (Reversing contactors can be ordered preassembled.)
- Power and control prewiring kits.

Coil operating limits are:

- 85 to 110% of nominal voltage in AC.
- 70 to 125% of nominal voltage in DC, making TeSys D-Line contactors suitable for use in the harshest conditions.

Changing the AC contactor coil for voltage adjustment requires no tools. Single coil size for ratings up to 32A.

To protect your electronic equipment:

- The surge suppressors are fitted to the contactors without the need for tools and without increasing overall dimensions.
- The DC coils are supplied with built-in surge suppressors.

Power connections are in the same place for any contactor, simplifying cabling and allowing for the use of busbars.

Easy installation Easy wiring Smaller units

TeSys® *The New D-Line*

Motor-starter solutions for all applications

The GV2 manual motor starter and TeSys D-Line contactors can be coupled to a connection block in an instant.

Type 2 coordination (IEC 60947-4-1)

Provides personnel protection while minimizing downtime to improve productivity.

GV2 with TeSys D-Line contactor

Complies to UL 508F standards for combination motor starters.

TeSys D-Line overload relay

Separately mounted, thermal overload relay (single size) can be combined with contactors up to 32A in the same 45-mm module.

- Class 10 and 20.
- Manual and automatic resetting. For added safety, automatic mode must be activated by the operator.
- Sealable, built-in cover guarantees tamper-resistant settings for added motor protection.
- Prewiring kit for wireless installations between the contactor and the overload relay.
- Optional, remote electrical reset available.

New fuseholder

Combines with a contactor up to 32A for a fusible starter option. Features include:

- 45-mm wide.
- Class CC KTK-R fuse.
  - Power up to 30 amps
  - 600 volts
  - 3 phase
- Connects to D09 through D32 contactors.
- Accepts GV2 front-mounted auxiliary contact, allowing the contactor to drop out prior to pulling a fuse out while under load.

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