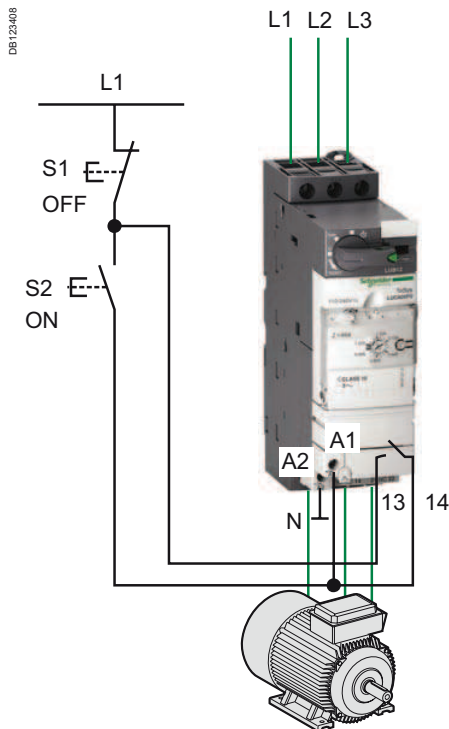


The Standard TeSys U replaces conventional components in a smaller space

- The Standard TeSys U starter-controller incorporates all the conventionally associated functions: circuit breaker + contactor + thermal relay.
- It considerably reduces wiring time.
- The electrical coordination of the components is intrinsically ensured.

- Space-saving
- Time-saving
- Safety

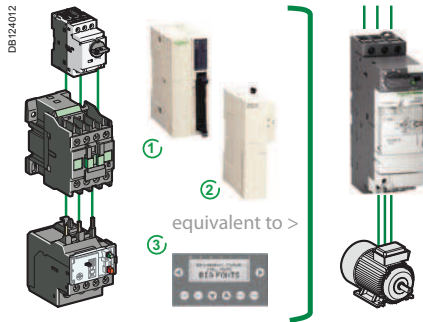


The Standard TeSys U meets 80 % of protection – motor control requirements

The functions embedded in the Standard TeSys U unit are those which are commonly deployed in simple solutions:

- Adjustable protection against overloads and short-circuits
- ON/OFF control of one direction of rotation
- The wiring diagram illustrates ON/OFF pushbutton control. TeSys U incorporates "coil" terminals A1-A2 and "self-holding auxiliary contacts" 13-14.

- Conventional control diagram
- Preservation of know-how



- ① Input / output card
- ② Communication interface
- ③ LCD display unit

Furthermore, this version significantly extends the control possibilities. Advanced TeSys U incorporates the basic functions (protection, motor control) to which one or more functions that are usually carried out with automation modules can be added: motor status remote indication, protection trip remote indication, remote reset, overload alarm, transmission over bus, alphanumeric display, etc.

- Space-saving
- Economical optimisation

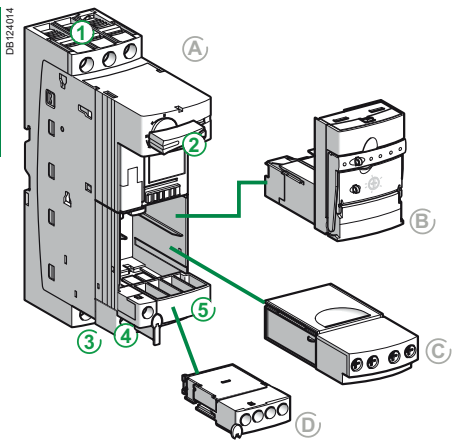


By also allowing variable speed control

■ Advanced TeSys U connected to the XYZ variable speed controller also constitutes a natural variable speed control solution. It makes it possible to maintain the homogeneity of a motor control panel already well equipped with TeSys U starter-controllers.

- Homogeneity
- Simplicity
- Performance

1



- ① Power supply terminal block
- ② ON/OFF/Reset control handle
- ③ "Motor" terminal block
- ④ "Coil" power supply terminal
- ⑤ Built-in auxiliary contacts

Creating a motor feeder with TeSys U requires combination of at least a power base and a control unit. The plug and play principle of this product allows other modules to be added to provide access to additional functions.

Standard TeSys U - non-reversing

This configuration consists of a power base, a control unit and possibly an auxiliary contact module. It is used to protect a motor and to switch it ON/OFF.

- A) LUB12 or LUB32 power base**
This power base incorporates the power components: terminal blocks, switching mechanism and power contacts. It also includes a set of NO-NC auxiliary contacts and their terminal blocks.
- B) LUCA, LUCL control unit**
These control units incorporate the detection and protection functions with respect to:
 - overload – short circuit
 - phase failure – phase imbalance
 - earth fault protection (equipment protection only).
 The LUCL control unit is exclusively used with the variable speed controller.
- C) Additional auxiliary LUF signalling contacts**
- D) LUA signalling contacts**
 - Indicate that the protective device has tripped.

LU2B 12 - LU2B 32
Reverser control assembly



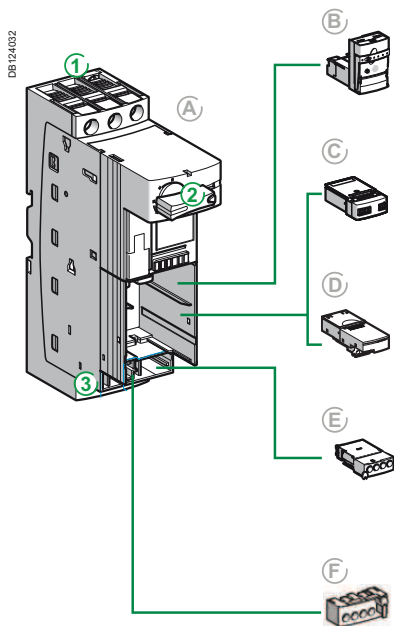
Standard TeSys U - non-reversing and reversing

LU2B12
Reversing power base allowing a motor to be controlled in both directions of operation. It incorporates the power components and the auxiliary contacts used to remotely indicate the direction of rotation. The NO-NC auxiliary contacts used to remotely indicate the ON/OFF status are to be ordered separately, in the same way as the LUCA control module.

Advanced TeSys U

For advanced applications or applications incorporating communication

- ① Power supply terminal block
- ② ON/OFF/Reset control handle
- ③ "Motor" terminal block



Advanced TeSys U - non-reversing

This version consists of a power base, an advanced control unit and possibly an information or communication module for the measurement and alarm functions. They complement the main ON/OFF control function.

Ⓐ LUB120, LUB320 power base

This power base incorporates the power components: terminal blocks, switching mechanism and power contacts. It also incorporates the auxiliary contacts (terminal block not included).

Ⓑ LUCB, LUCC, LUCD supervisable control units

detection / tripping / measurement

Ⓒ LUCM control unit with display

detection / tripping / measurement
load parameter, alarm, log display, etc.

Ⓓ Thermal overload signalling LUF module,

Motor load indication LUF module
Motor overload alarm LUF module

Ⓔ LUL communication modules

AS-Interface, Modbus, Profibus DP, CANopen,
DeviceNet or Advantys STB

Ⓕ LUA signalling contacts

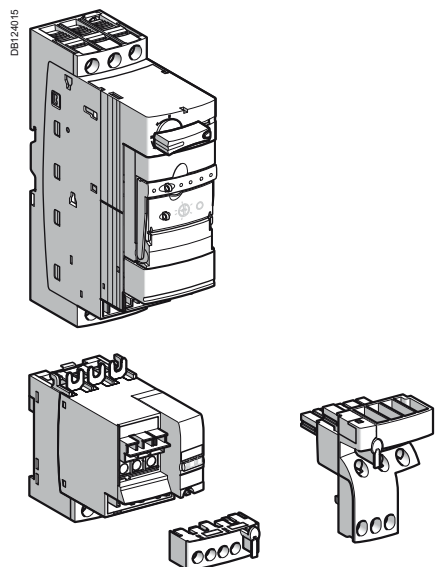
indicate that the protective device has tripped

Plug-in integrated auxiliary contact terminal block

Advanced TeSys U - non-reversing and reversing

An LU2M reverser block is added according to the principle of the Standard TeSys U. No preassembled reverser assembly in the Advanced TeSys U version.

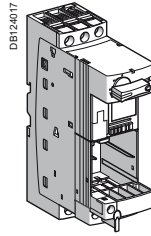
A reverser assembly can be built by ordering the different parts separately. This makes it possible to modify the installation or to create assemblies that incorporate a communication module.



1

Power base

For assembling components, connecting to the process, ON / OFF operation, resetting.



Standard TeSys U

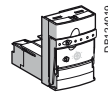
LUB12
LUB32

Control unit

This unit is essential for providing all the electrical protection functions. Some of these also provide advanced measurement, alarm and display functions.

Standard control unit

LUCA
Class 10 - 3-phase
(see page 1/71)



- Protection against overloads and short-circuits.
- Protection against phase failure and phase imbalance.
- Earth fault protection (equipment protection only).
- Manual reset.

Magnetic control unit

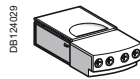
LUCL
For use with a variable speed controller or a soft starter
(see page 1/134)



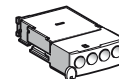
- Short-circuit protection.
- Manual reset.
- Motor thermal overload protection must be provided by the variable speed controller or the soft starter.

Auxiliary contact module

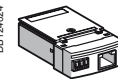
For additional remote indication contacts. Indication of pole status or cause of tripping



Auxiliary contact module - pole status
LUFN**
(see page 1/65)

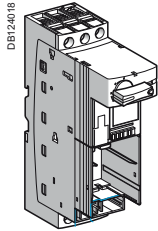


Auxiliary contact module - protection status
LUFA1C (depending on configuration)
(see page 1/65)



Auxiliary contact module (protection status, pole status) on RJ connector
LUF C00
(see page 1/78)

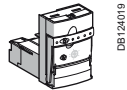
Light blue: Code showing the compatibility of modules with control units.



Advanced TeSys U
LUB120
LUB320

Control and diagnostic unit

- LUCB**
Class 10 - 3-phase
- LUCC**
Class 10 - single-phase
- LUCD**
Class 20 - 3-phase
(see page 1/71)

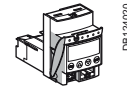


Same functions as the standard control unit.
In addition, in conjunction with a function module:

- fault differentiation with manual reset,
- fault differentiation with remote or automatic reset,
- thermal overload alarm,
- indication of motor load.

Multi-function control unit

- LUCM**
Classes 5 to 30 –
single-phase and
three-phase
(see page 1/72)

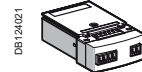


Same functions as the standard control unit.
In addition, reset parameters can be set to manual or automatic.

- protection function alarm.
- indication on front panel or on remote terminal.
- "log" function.
- main motor parameter "monitoring" function.
- differentiation of thermal overload and magnetic fault.
- overload, no-load running.

Fault signalling module

For indicating the cause of tripping and allowing a reset.



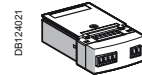
Thermal overload signalling module and manual reset.
LUF DH11
(see page 1/73)



Thermal overload signalling module and automatic or remote reset
LUG DA01 and **LUF DA10**
(see page 1/73)

Load level module

For indicating the load level, alerting a threshold overshoot.



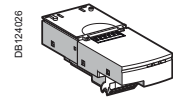
Motor load indication module.
LUF V2
(see page 1/73)



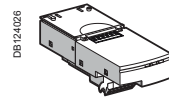
Thermal overload alarm module
LUF W10
(see page 1/73)

Communication module

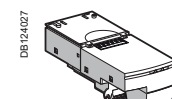
For monitoring the status of the starter-controller from a centralised automation system.



CANopen communication module
LUF V2
(see page 1/86)



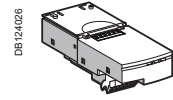
DeviceNet communication module
LUL C09
(see page 1/92)



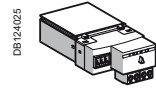
Advantys stb communication module
LUL C15
(see page 1/92)



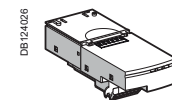
Modbus communication module
LUL C033
(see page 1/94)



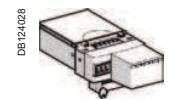
BECKHOFF communication module
LUF C14
(contact us)



AS-Interface communication module
ASILUF C51
(see page 1/80)



Profibus DP communication module
LUL C07
(see page 1/82)



Module for Ethernet communication
LUL C033 + TeSys port
(contact us)