

Life Is On

Schneider  
Electric

# TeSys<sup>®</sup> U Motor Control and Protection

Lift your productivity to the next level



[schneider-electric.us/tesys](https://schneider-electric.us/tesys)

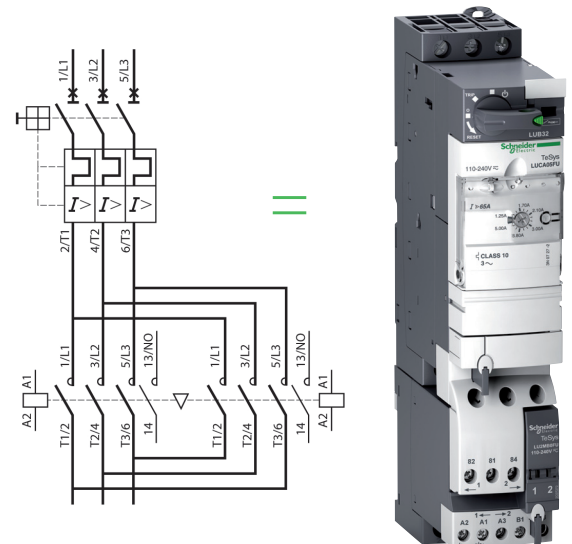


# Let the TeSys U simplify your solution

The TeSys U is an innovative “self-protected combination starter” providing motor disconnect, motor branch circuit protection, motor controller and motor overload protection in a **single product**. This unique design conforms to UL 508 standard and available in both **IEC** and **NEMA** versions.

The TeSys U covers motor applications up to 20 hp at 480V (32A) with a standard short circuit current rating of 65kA in wye configuration. The optional current limiter increases this rating to 130kA delta.

Unique prewired reversing block in 45mm width reduces the size of the panel with large savings in number of wires and installation time.



# Benefit from unique values of the TeSys U

## Maximum flexibility

TeSys U features a unique concept in flexibility.

- A single control unit provides:
  - wide range of current settings
  - wide range of control voltages
- 6 references cover 0.15 to 32 A
- Starter can be wired completely in the workshop & plug in of the control unit at customer site
- Fast modifications without any tools



## High performance features with advanced functionality

The TeSys U offers a complete, high-performance range of remote monitoring, control solutions to provide you with the information you need.

- Can integrate numerous existing communication systems
- Display the actual motor values and parameters
- Alarms before tripping to reduce the down time of the machine/process
- Fault log with the last 5 trips
- Statistics:
  - # of starts
  - # of trips
  - Operating hours



## Unique efficiency

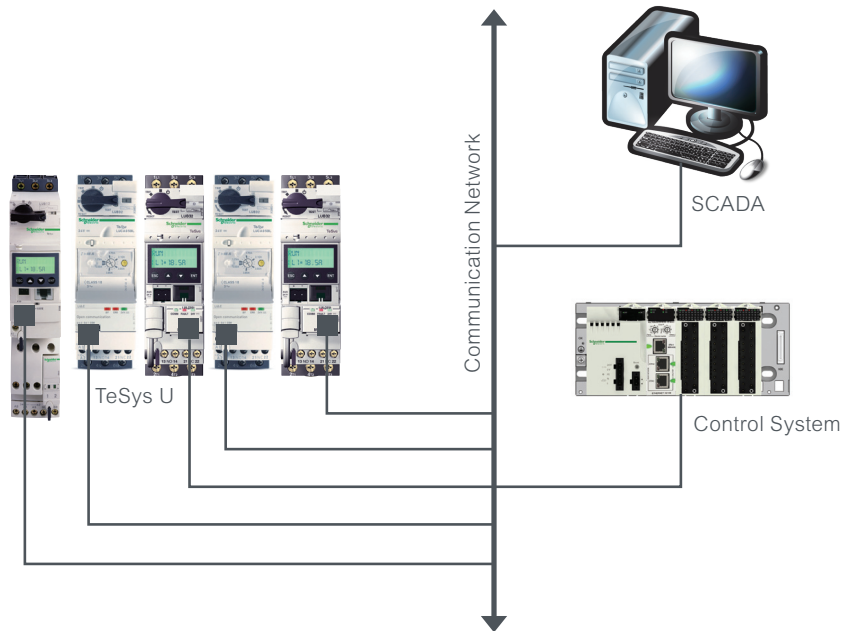
TeSys U is the world's smallest motor starter up to 20 hp at 480V.

- Space savings in the panel
- Assembly and wiring times reduced
- Less cabling = Less risk of errors

## Safety & reliability

Leverage TeSys U for your safety and reliable applications.

- Integrated mirror contact
- Lockable in OFF position during maintenance
- Sealable control unit
- 15 million operations mechanical life
- Up to 3600 cycles/hour
- Low consumption coil saves energy and eliminates the need for interposing relay in control systems



Advantys STB



SoLink

If your application requires only basic functions . . .

# Let the TeSys U meet your needs

## Power base

For assembling components, ON/OFF operation and resetting

- 2 power bases: up to 12 A and up to 32 A
- Direct starter and reversing starter models



## Control unit

Performs all the electrical protection functions

- Overload, over current, & short circuit protection
- Ground fault protection
- Phase loss & phase unbalance protection

## Control auxiliary contacts

- For additional remote indication contacts

## Power auxiliary contacts (trip status)

- To supervise motor starter status

## Quick selection

### Select 1

+

### Select 1

### Optional

#### Base Power Unit



Non-Reversing

LUB	12
-----	----

0.. 12A with terminal	12
0.. 32A with terminal	32
NEMA Size 1	32NR



Reversing

LUB2B	12	BL
-------	----	----

0.. 12A with terminal	12
0.. 32A with terminal	32
24 VDC	BL
24 VAC	B
48...72 VAC or 48 VDC	ES
110..240 VAC/DC	FU

#### Control Unit



LUC	A	X6	BL
-----	---	----	----

Class 10, 3Ph	A		
Class 10, 1Ph	C		
Class 20, 3Ph	D		
0.15 to 0.6 A		X6	
0.35 to 1.4 A		1X	
1.25 to 5 A		05	
3 to 12 A		12	
4.5 to 18 A		18	
8 to 32 A		32	
24 VDC			BL
24 VAC			B
48...72 VAC/48 VDC			ES
110..240 VAC/DC			FU

#### Auxiliary Contacts

Contactor auxiliary contacts



LUFN	11
------	----

1NO + 1NC	11
2NC	02
2NO	20

Side contacts 2NO LUA8E20

Power auxiliary contacts (trip status)



LUA1C	20
-------	----

1NO + 1NC	11
2NO	20

#### Accessories



Description	Reference
NEMA 1, 12, 3R, 4, 4X black door mechanism kit	LU9APN43
NEMA 1, 12, 3R, 4, 4X red/yellow door mechanism kit	LU9APN44



Description	Reference
Line spacer for UL 508 Type E	LU9SP0
Current limiter 130kA @ 480V	LUALB1



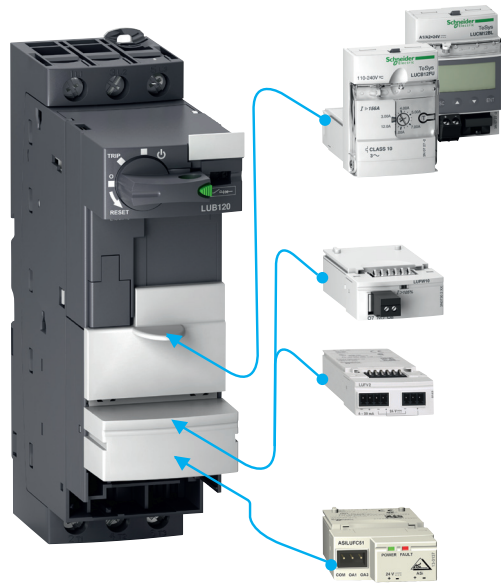
If your application requires advanced functions . . .

# Enhance your imagination with advanced motor protection

## Power Base

For assembling components, ON/OFF operation and resetting

- 2 power bases: up to 12 A and up to 32 A
- Direct starter and reversing starter models



## Control Unit

Performs all the electrical protection functions

- Overload, over current, & short circuit protection
- Ground fault protection
- Phase loss & phase unbalance protection
- Multifunction unit comes with display & provides underload, longstart & jam protection

## Function modules

- Thermal overload alarm
- Indication of motor load
- Thermal overload signaling & manual reset
- Thermal overload signaling & automatic or remote reset

## 6 communication modules

- AS-Interface
- Profibus DP
- CANopen
- DeviceNET
- Advantys STB
- Modbus

## Quick selection

### Select 1

+

### Select 1

### Optional

or

### Optional

#### Base Power Unit



Non-Reversing

LUB	120
-----	-----

0.. 12A with terminal	12
0.. 12A no terminal	120*
0.. 32A with terminal	32
0.. 32A no terminal	320*
NEMA Size 1	32NR



Reversing

LUB2B	120	BL
-------	-----	----

0.. 12A with terminal	12
0.. 12A no terminal	120*
0.. 32A with terminal	32
0.. 32A no terminal	320*
24 VDC	BL
24 VAC	B
48...72 VAC or 48 VDC	ES
110...240 VAC/DC	FU

\*prewired cables to be ordered separately

#### Control Unit



LUC	B	X6	BL
-----	---	----	----

Class 10, 3Ph	B	
Class 10, 1Ph	C	
Class 20, 3Ph	D	
Multifunction	M	
0.15 to 0.6 A	X6	
0.35 to 1.4 A	1X	
1.25 to 5 A	05	
3 to 12 A	12	
4.5 to 18 A	18	
8 to 32 A	32	
24 VDC		BL
24 VAC		B
48...72 VAC/48 VDC		ES
110...240 VAC/DC		FU

#### Communication Module



LULC	033
------	-----

Modbus Serial	033
Profibus DP	07
CANopen	08
DeviceNet	09
Advantys STB	15
ASI V2	ASILUFC51

#### Prewired Cables



Description	Reference
Prewired cable for non-reversing power base	LU9BN11C or LU9BN11L
Prewired cable for reversing power base	LU9MRC or LU9MRL

#### Function Module



LUF	DH11
-----	------

Fault diff. with manual reset	DH11*
Fault diff. with auto reset	DA10*
Thermal overload pre-alarm	W10*
Motor load indication (4-20mA)	V2
Parallel wiring with PLC (SoLink)	C00

\*Not compatible with LUCM

#### Accessories

Description	Reference
Line spacer for UL 508 Type E	LU9SP0
Current limiter 130kA @ 480V	LUALB1

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**Schneider**  
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**Schneider Electric USA, Inc.**

8001 Knightdale Blvd.  
Knightdale, NC 27545  
Phone: 919-266-3671

[schneider-electric.us](http://schneider-electric.us)

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