



Smarter Load Management with TeSys Island

The Key to Unprecedented Efficiency

Digital Load Manager

TeSys Island - the innovative & digital multifunctional load management solution up to 80A

Industry 4.0

Predictive Maintenance

Cyber Secure



TeSys Active

TeSys Island

•All-in-one Solution for Versatile & Flexible Load Management•

Motor Protection

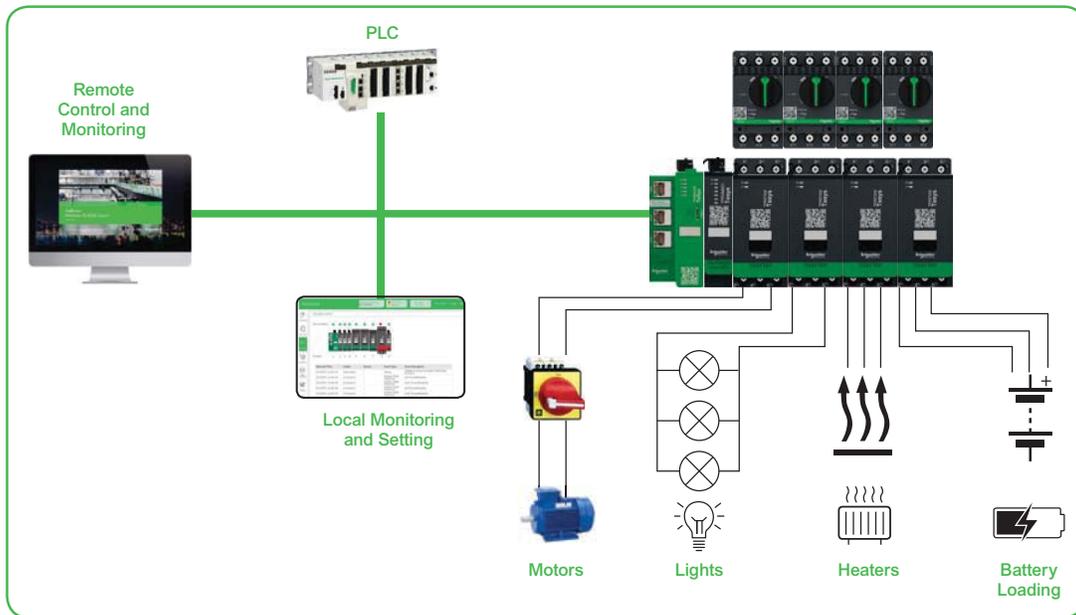
- Motor Overload
- Over/Under Current
- Jam/Stall
- Long Start
- Rapid Restart Lockout

Upstream Protection

- Phase Loss
- Phase Reversal
- Phase Unbalance
- Ground Current Detection

Analytics

- Health Diagnostic
- Energy Management
- Demand Management



Designation	Product Specification	Commercial Reference
TeSys island components		
Standard Starter	9A (AC-3)	TPRST009
Standard Starter	25A (AC-3)	TPRST025
Standard Starter	38A (AC-3)	TPRST038
Standard Starter	65A (AC-3)	TPRST065
Standard Starter	66A (AC-3) - 80A (AC-1)	TPRST080
SIL Starter	9A (AC-3)	TPRSS009
SIL Starter	25A (AC-3)	TPRSS025
SIL Starter	38A (AC-3)	TPRSS038
SIL Starter	65A (AC-3)	TPRSS065
SIL Starter	66A (AC-3) - 80A (AC-1)	TPRSS080
Power interface module	9A (AC-3)	TPRPM009
Power interface module	38A (AC-3)	TPRPM038
Power interface module	80A (AC-3)	TPRPM080
Voltage interface module		TPRVM001
SIL interface module		TPRSM001
Digital I/O module	(4 input - 2 output)	TPRDG4X2
Analog I/O module	(2 input -1 output)	TPRAN2X1
Bus Coupler	EtherNet/IP - Modbus TCP	TPRBCEIP
Bus Coupler	PROFINET	TPRBCPFN
Bus Coupler	PROFIBUS	TPRBCPFN
Assembly and Wiring Kits		
Kit for reversing starter application	for 9, 25, 38A (size 1 and 2) starters	LAD9R1
Kit for reversing starter application	for 65, 80A (size 3) starters	LAD9R3
Jumper bar 3-pole for Star Delta application	for 9, 25, 38A (size 1 and 2) starters	LAD9P3
Kit for reversing starter application	for 65, 80 A (size 3) starters, a hazard sticker is provided	LAD9SD3S

*Architecture shown above is only for graphical representation

TeSys Control

Ultra motor starters

Introduction

From traditional solution



Ultra motor starter- All in one block for advance protection

Motor circuit breaker:
GV2L



Magnetic protection
> short-circuit protection

Contactor:
LC1D



Control
> Start /Stop

Status monitoring
> signaling
> alarm monitoring

Protection relay:
LRD

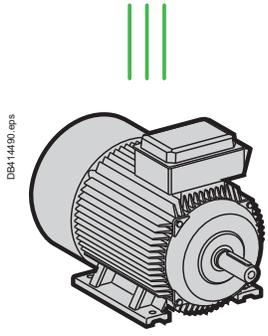


Thermal protection
> overload



Ultra motor starter
> All basic or advanced protection and control functions in one block

and more...
> Overload indication and alarm
> Status report, remote control via communication bus



Ultra motor starters
can be used in
80 %
of motor protection and control applications.

TeSys Control

Ultra motor starters



- Total Coordinated Starter – 3 functions in a single device
- Compact Starter, DOL / RDOL upto 18.5kW (38A, AC-3) in 45mm width
- Direct connectivity to Modbus / Profibus / CANopen / DeviceNet
- Higher switching life - 15Million operations, 2Million AC-43 electrical life
- Breaking capacity upto 130kA

Control Unit

Performs all the electrical protection functions to cover main applications from 0 to 38A.

Some of these also provide advanced measurement, alarm and display functions.

4 simple function modules

Thermal overload alarm Indication of motor load
Thermal overload signalling and manual reset
Thermal overloaded signalling and automatic or remote reset.

4 communication modules

Profibus DP
CANopen
DeviceNet
Modbus.

Power Base

For assembling components, ON/OFF operation and resetting.
> 3 power bases:
upto 12A and upto 38A
> Direct starter and reversing starter models.

40%

“TeSys solutions allow us to reduce the size of our enclosure” says a panel builder from the water treatment sector

60%

“Late customization means that we can build 60% of the panels, even though the project design has not yet been completed” says an engineer in a food processing industry

Quick Selection

Select 1	+	Select 1	Optional	or	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* 0.. 38A with terminal 38 0.. 38A no terminal 380* Reversing LU2B 120 BL 0.. 12A with terminal 12 0.. 12A no terminal 120* 0.. 32A with terminal 32 0.. 32A no terminal 320* 0.. 38A with terminal 38 0.. 38A no terminal 380* 24 V DC BL 24 V AC B 48...72 VAC or 48 VDC ES 110...240 VAC/DC FU <small>*prewired cables to be ordered separately</small>		Control Unit LUC B X6 BL Class 10, 3Ph B 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 38 A 38 24V DC BL 24VAC B 48...72 VAC/48 VDC ES 110...240VAC/DC FU	Communication Module* LULC 033 Modbus Serial 033 Profibus DP 07 CANopen 08 DeviceNet 09 Prewired Cables <table border="1"> <thead> <tr> <th>Description</th> <th>Reference</th> </tr> </thead> <tbody> <tr> <td>Prewired cable for non-reversing power base</td> <td>LU9BN11C or LU9BN11L</td> </tr> <tr> <td>Prewired cable for reversing power base</td> <td>LU9MRC or LU9MRL</td> </tr> </tbody> </table>	Description	Reference	Prewired cable for non-reversing power base	LU9BN11C or LU9BN11L	Prewired cable for reversing power base	LU9MRC or LU9MRL	or	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	or	Auxiliary Contacts LUFN 11 Contactor auxiliary contacts 1NO + 1NC 11 2NC 02 2NO 20 Side contacts 2NO LUA8E20 Power auxiliary contacts (trip status) LUA1C 20 1NO + 1NC 11 2NO 20	Accessories <table border="1"> <thead> <tr> <th>Description</th> <th>Reference</th> </tr> </thead> <tbody> <tr> <td>Line spacer for UL508 Type E</td> <td>LU9SPO</td> </tr> <tr> <td>Current limiter 130kA@460V</td> <td>LUALB1</td> </tr> </tbody> </table>	Description	Reference	Line spacer for UL508 Type E	LU9SPO	Current limiter 130kA@460V	LUALB1
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*Suitable with 24V DC starter variant only

Note: For prices please contact Customer Care