



### Main

Range	TeSys
Product name	TeSys LF
Product or component type	Enclosed DOL starter
Device application	AS interface
Device composition	Circuit-breaker AS interface module Contactor
Utilisation category	AC-3
Network type	AC
[Uc] control circuit voltage	24 V for AC circuit at 50/60 Hz
Thermal protection adjustment range	2.5...4 A
Control type	Key switch 2 positions for local/AS-Interface control - bus - local Rotary handle for protection control - OFF - Trip - ON

### Complementary

Motor power kW	0.75 kW at 220/230 V - AC at 50/60 Hz 1.5 kW at 400/415 V - AC at 50/60 Hz
Network frequency	50/60 Hz
[Ue] rated operational voltage	415 V - AC at 50/60 Hz for power circuit 250 V - AC at 50/60 Hz for output control relay 30 V - DC for output control relay
[Uimp] rated impulse withstand voltage	6 kV for power circuit conforming to IEC 60947-1 2.5 kV for 24 V conforming to IEC 60947-1 2.5 kV for sensor conforming to IEC 60947-1 2.5 kV for AS-Interface conforming to IEC 60947-1
Insulation resistance	> 1000 mOhm between output and communication
Insulation	1500 V between output and ground 1500 V between output and internal logic Between input and communication
[Ui] rated insulation voltage	AC at 50/60 Hz conforming to IEC 60947
[Ithe] conventional enclosed thermal current	5 A for output control relay at 40 °C
Protection type	Inductive overvoltage Phase failure
Breaking capacity	100 kA at 230/240 V conforming to IEC 60947-2


Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Mechanical durability	Circuit breaker : 0.1 Mcycles Contactor : 30 Mcycles
Electrical durability	Circuit breaker : 0.1 Mcycles Contactor : 0.8 Mcycles - AC-3 - 8.5 A Relay : 0.1 Mcycles - 24 V with 6 cyc/mn - AC-12 - 5 A Relay : 1 Mcycles - 24 V with 15 cyc/mn - AC-12 - 1 A Relay : 0.5 Mcycles - 24 V with 15 cyc/mn - AC-14 - 1 A Relay : 1 Mcycles - 24 V with 15 cyc/mn - AC-14 - 0.5 A Relay : 5 Mcycles - 24 V with 30 cyc/mn - AC-14 - 0.25 A Relay : 0.1 Mcycles - 24 V with 6 cyc/mn - DC-12 - 5 A Relay : 0.2 Mcycles - 24 V with 6 cyc/mn - DC-12 - 2 A Relay : 0.5 Mcycles - 24 V with 15 cyc/mn - DC-3 - 1 A Relay : $\geq$ 1 Mcycles - 24 V with 30 cyc/mn - DC-3 - 0.25 A
Current consumption	20 mA for communication bus during operation 60 mA for communication bus sensor 0 mA at 24 V for supply circuit de-energisation 30 mA at 24 V for supply circuit maintained mode 110 mA at 24 V for supply circuit inrush
Local signalling	Product status by 3 LEDs Input/output status by LED
Number of inputs	2 M12
Nominal input value	19...30 V 50 mA - DC
Input description	Status D0 : forward stop - bit value 0 Status D1 : reverse stop - bit value 0 Status D2 : disable relay - bit value 0 Status D3 : unused - bit value 0 Status D0 : forward start - bit value 1 Status D1 : reverse start - bit value 1 Status D2 : enable relay - bit value 1 Status D3 : unused - bit value 1
Input type	Resistive
Sensor compatibility	2 or 3-wire PNP
Output description	Command D0 : not ready - bit value 0 Command D1 : stopped - bit value 0 Command D2 : sensor 1 missing - bit value 0 Command D3 : sensor 2 missing - bit value 0 Command D0 : ready - bit value 1 Command D1 : started - bit value 1 Command D2 : sensor 1 present - bit value 1 Command D3 : sensor 2 present - bit value 1
Response time	Output control relay : $\leq$ 10 ms during closing Output control relay : $\leq$ 15 ms during opening
Contacts type and composition	1 C/O
AS-interface profile	7DFF - standard
Cable gland type	Supply circuit : Pg 16 - 10...15 mm Power circuit : Pg 16 - 10...15 mm Output control relay : Pg 13 - 10...15 mm Output control relay : Pg 16 - 10...15 mm
Connections - terminals	Supply circuit: screw clamp terminals 1 x 1.5...2 x 6 mm <sup>2</sup> rigid Supply circuit: screw clamp terminals 1 x 1.5...2 x 6 mm <sup>2</sup> flexible without cable end Supply circuit: screw clamp terminals 1 x 1.5...2 x 4 mm <sup>2</sup> flexible with cable end Power circuit: screw clamp terminals 1 x 1.5...2 x 4 mm <sup>2</sup> rigid Power circuit: screw clamp terminals 1 x 1.5...2 x 4 mm <sup>2</sup> flexible without cable end Power circuit: screw clamp terminals 1 x 1.5...1 x 2.5 mm <sup>2</sup> flexible with cable end Output control relay: screw terminals 1 x 0.5...1 x 1.5 mm <sup>2</sup> rigid Output control relay: screw terminals 1 x 0.5...1 x 1.5 mm <sup>2</sup> flexible without cable end Output control relay: screw terminals 1 x 0.5...1 x 1.5 mm <sup>2</sup> flexible with cable end
Tightening torque	Supply circuit : 1.7 N.m - with screwdriver flat $\varnothing$ 5.5 mm Power circuit : 0.8 N.m - with screwdriver flat $\varnothing$ 5.5 mm Output control relay : 0.7 N.m - with screwdriver flat $\varnothing$ 3.5 mm
Width	219 mm
Height	245 mm
Depth	179 mm
Product weight	1.35 kg

## Environment

Electromagnetic compatibility	<p>Electrostatic discharge 8 kV level 3 - in air - conforming to EN/IEC 61000-4-2</p> <p>Electrostatic discharge 4 kV level 2 - in indirect mode - conforming to EN/IEC 61000-4-2</p> <p>Electrical fast transient/burst immunity test 2 kV level 3 conforming to EN/IEC 61000-4-4</p> <p>Surge immunity test 4 kV level 4 - power, line to ground - conforming to IEC 61000-4-5</p> <p>Surge immunity test 2 kV level 4 - power, line to line - conforming to EN/IEC 61000-4-5</p> <p>Surge immunity test 2 kV level 2 - control circuit, line to ground - conforming to IEC 61000-4-5</p> <p>Surge immunity test 500 V level 2 - control circuit, line to line - conforming to EN/IEC 61000-4-5</p> <p>Conducted RF disturbances 10 V/m conforming to IEC 61000-4-6</p> <p>Conducted RF disturbances 10 V/m conforming to ENV 50141</p> <p>Radiated radio-frequency electromagnetic field immunity test 10 V/m conforming to IEC 61000-4-3</p> <p>Radiated radio-frequency electromagnetic field immunity test 10 V/m conforming to ENV 50204</p> <p>Radiated radio-frequency electromagnetic field immunity test 10 V/m conforming to ENV 50140</p> <p>Disturbing field emission class B conforming to ENV 55011</p> <p>Disturbing field emission class B conforming to CISPR 11</p>
Mechanical robustness	<p>Shocks : 10 Gn during contactor open conforming to IEC 60068-2-27</p> <p>Shocks : 15 gn during contactor closed conforming to IEC 60068-2-27</p> <p>Vibrations : 2 Gn during contactor open conforming to IEC 60068-2-6</p> <p>Vibrations : 4 Gn during contactor closed conforming to IEC 60068-2-6</p>
IP degree of protection	IP54 conforming to IEC 60529
Protective treatment	TC
Fire resistance	960 °C conforming to IEC 60695-2-1
Operating altitude	2000 m
Standards	<p>EN 60204-1</p> <p>EN 60439-1</p> <p>EN 60947-1</p> <p>IEC 60204-1</p> <p>IEC 60439-1</p> <p>IEC 60947-1</p>
Material	Steel - white : RAL 9001
Ambient air temperature for operation	-5...40 °C conforming to IEC 61439-1
Ambient air temperature for storage	-40...80 °C conforming to IEC 61439-1

## Offer Sustainability

RoHS (date code: YYWW)	<p>Compliant - since 0925 - Schneider Electric declaration of conformity</p> <p> <a href="#">Schneider Electric declaration of conformity</a></p>
REACH	<p>Reference not containing SVHC above the threshold</p> <p><a href="#">Reference not containing SVHC above the threshold</a></p>
Product end of life instructions	Need no specific recycling operations

## Contractual warranty

Warranty period	18 months
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