Product data sheet

Specifications

TeSys LF - enclosed DOL starter - 1.6...2.5 A - local/ASI

LF3P07EA79

Discontinued

Main

Range	TeSys
Product Name	TeSys LF
Product Or Component Type	Enclosed DOL starter
Device Application	AS interface
Device Composition	Contactor AS interface module Circuit-breaker
Utilisation Category	AC-3
Network Type	AC
[Uc] Control Circuit Voltage	24 V AC 50/60 Hz
Thermal Protection Adjustment Range	1.6…2.5 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	0.37 kW at 220/230 V AC 50/60 Hz 0.75 kW at 400/415 V AC 50/60 Hz
Network Frequency	50/60 Hz
[Ue] Rated Operational Voltage	Power circuit: 415 V AC 50/60 Hz Output control relay: 250 V AC 50/60 Hz Output control relay: 30 V DC
[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 for 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	415 V AC 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 60947-2 100 kA at 400/415 V conforming to IEC 60947-2
Mechanical Durability	0.1 Mcycles for circuit breaker 30 Mcycles for contactor

Electrical Durability	Circuit breaker: 0.1 Mcycles Contactor: 0.8 Mcycles - AC-3 - 8.5 A Relay: 0.1 Mcycles - 24 V, operating rate <6 cyc/mn - AC-12 - 5 A Relay: 1 Mcycles - 24 V, operating rate <15 cyc/mn - AC-12 - 1 A Relay: 0.5 Mcycles - 24 V, operating rate <15 cyc/mn - AC-14 - 1 A Relay: 1 Mcycles - 24 V, operating rate <15 cyc/mn - AC-14 - 0.5 A Relay: 5 Mcycles - 24 V, operating rate <30 cyc/mn - AC-14 - 0.25 A Relay: 0.1 Mcycles - 24 V, operating rate <6 cyc/mn - DC-12 - 5 A Relay: 0.2 Mcycles - 24 V, operating rate <6 cyc/mn - DC-12 - 2 A Relay: 0.5 Mcycles - 24 V, operating rate <15 cyc/mn - DC-3 - 1 A Relay: 1 Mcycles - 24 V, operating rate <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: 3 LEDs Input/output status: 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	<= 10 ms closing for output control relay <= 15 ms opening for output control relay
Contacts Type And Composition	1 C/O
As-Interface Profile	7A70 - extended A/B
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 mm²rigid Supply circuit: screw clamp terminals, 1 x 1.5...2 x 6 mm²flexible without cable end Supply circuit: screw clamp terminals, 1 x 1.5...2 x 4 mm²flexible with cable end Power circuit: screw clamp terminals, 1 x 1.5...2 x 4 mm²rigid Power circuit: screw clamp terminals, 1 x 1.5...2 x 4 mm²flexible without cable end Power circuit: screw clamp terminals, 1 x 1.5...1 x 2.5 mm²flexible with cable end Output control relay: screw terminals, 1 x 0.5...1 x 1.5 mm²rigid Output control relay: screw terminals, 1 x 0.5...1 x 1.5 mm²flexible without cable end Output control relay: screw terminals, 1 x 0.5...1 x 1.5 mm²flexible with cable end
Tightening Torque	Supply circuit: 1.7 N.m - with screwdriver flat Ø 5.5 mm Power circuit: 0.8 N.m - with screwdriver flat Ø 5.5 mm Output control relay: 0.7 N.m - with screwdriver flat Ø 3.5 mm
Width	175 mm
Height	195 mm
Depth	175 mm
Net Weight	1.35 kg

Environment

Electromagnetic Compatibility	Electrostatic discharge - test level: 8 kV level 3 (in air) conforming to EN/IEC 61000-4-2 Electrostatic discharge - test level: 4 kV level 2 (in indirect mode) conforming to EN/IEC 61000-4-2 Surge immunity test - test level: 4 kV level 4 (power, line to ground) conforming to IEC 61000-4-5 Surge immunity test - test level: 2 kV level 4 (power, line to line) conforming to EN/IEC 61000-4-5 Surge immunity test - test level: 2 kV level 2 (control circuit, line to ground) conforming to IEC 61000-4-5 Surge immunity test - test level: 500 V level 2 (control circuit, line to line) conforming to EN/IEC 61000-4-5 Electrical fast transient/burst immunity test - test level: 2 kV level 3 conforming to EN/IEC 61000-4-4 Conducted RF disturbances - test level: 10 V/m conforming to IEC 61000-4-6 Conducted RF disturbances - test level: 10 V/m conforming to ENV 50141 Radiated radio-frequency electromagnetic field immunity test - test level: 10 V/m conforming to IEC 61000-4-3 Radiated radio-frequency electromagnetic field immunity test - test level: 10 V/m conforming to ENV 50204 Radiated radio-frequency electromagnetic field immunity test - test level: 10 V/m conforming to ENV 50140 Disturbing field emission class B conforming to ENV 55011 Disturbing field emission class B conforming to CISPR 11
Mechanical Robustness	Shocks contactor open - 10 Gn conforming to IEC 60068-2-27 Shocks contactor closed - 15 gn conforming to IEC 60068-2-27 Vibrations contactor open - 2 GN conforming to IEC 60068-2-6 Vibrations contactor closed - 4 gn conforming to IEC 60068-2-6
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	IEC 60947-1 EN 60439-1 EN 60204-1 IEC 60439-1 IEC 60204-1 EN 60947-1
Material	Bottom: polycarbonate + 20 % FG - black Top: polycarbonate + 20 % FG - 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