Product data sheet
Characteristics

LF4MP05EU
TeSys LF - enclosed DOL reversing starter - 0.63...1 A - UL

Main

Range	TeSys
Product name	TeSys LF
Device short name	LF4MP
Product or component type	Enclosed DOL reversing starter
Device application	AS interface
Device composition	Reversing contactor Circuit-breaker AS interface module
Utilisation category	AC-3
Network type	AC
[Uc] control circuit voltage	24 V for AC circuit at 50/60 Hz
Thermal protection adjustment range	0.63...1 A
Control type	Rotary handle for protection control - OFF - Trip - ON Selector switch 3 positions for start/stop/start - 1 - 0 - 2

Complementary

Motor power kW	0.12 kW at 220/230 V - AC at 50/60 Hz 0.25 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	415 V 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 Short-circuit protection (magnetic) Thermal protection
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	Circuit breaker : 0.1 Mcycles Contactor : 30 Mcycles

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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 : >= 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 20 mA for output relay
Local signalling	Product status by 3 LEDs Input/Output status by LED
Number of inputs	2 M12
Input voltage	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
Input 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 : <= 10 ms during closing Output control relay : <= 15 ms during opening
Contacts type and composition	1 C/O
Actuator sensor interface profile [AS-i]	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	Power circuit : screw clamp terminals - flexible without cable end Output control relay : screw clamp terminals - rigid Output control relay : screw clamp terminals - flexible without cable end Supply circuit : screw clamp terminals - rigid Supply circuit : screw clamp terminals - flexible with cable end Power circuit : screw clamp terminals - flexible with cable end Supply circuit : screw clamp terminals - flexible without cable end Output control relay : screw clamp terminals - flexible with cable end Power circuit : screw clamp terminals - rigid
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	219 mm
Height	245 mm
Depth	179 mm
Product weight	1.55 kg

Environment

Electromagnetic compatibility	Electrostatic discharge 8 kV level 3 - in air - conforming to EN/IEC 61000-4-2 Electrostatic discharge 4 kV level 2 - in indirect mode - conforming- to EN/IEC 61000-4-2 Electrical fast transient/burst immunity test 2 kV level 3 conforming- to EN/IEC 61000-4-4 Surge immunity test 4 kV level 4 - power, line to ground - conforming- to IEC 61000-4-5 Surge immunity test 2 kV level 4 - power, line to line - conforming- to EN/IEC 61000-4-5 Surge immunity test 2 kV level 2 - control circuit, line to ground - conforming- to IEC 61000-4-5 Surge immunity test 500 V level 2 - control circuit, line to line - conforming- to EN/IEC 61000-4-5 Conducted RF disturbances 10 V/m conforming to IEC 61000-4-6 Conducted RF disturbances 10 V/m conforming to ENV 50141 Radiated radio-frequency electromagnetic field immunity test 10 V/m conforming- to IEC 61000-4-3 Radiated radio-frequency electromagnetic field immunity test 10 V/m conforming- to ENV 50204 Radiated radio-frequency electromagnetic field immunity test 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 : 10 Gn during contactor open conforming to IEC 60068-2-27 Shocks : 15 gn during contactor closed conforming to IEC 60068-2-27 Vibrations : 2 Gn during contactor open conforming to IEC 60068-2-6 Vibrations : 4 Gn during contactor closed 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	EN 60204-1 EN 60439-1 EN 60947-1 IEC 60204-1 IEC 60439-1 IEC 60947-1 UL 508 CSA C22.2 No 14
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

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0925 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold
Product environmental profile	Available Product Environmental Profile
Product end of life instructions	Available End Of Life Information

Contractual warranty

Warranty period	18 months

Product Life Status : Commercialised