ABILITY
Technical Datasheet

MC-185a

LS ELECTRIC — Metasol Magnetic Contactor
Brand: LS ELECTRIC | Series: Metasol



GENERAL	
Product code	**1366000200**
Product description	**MC-185a AC100-240V 50/60Hz, DC100-220V 2a2b (Metasol) EXP (MC185A-30-22-FV-B-E)**
Product type	**Metasol Contactor**
Product name	**MC-185a**
Main contact	**3NO**
Auxiliary contact	**2NO 2NC**
Control voltage	**AC100-240V 50/60Hz, DC100-220V**
Type of terminal	**Screw**
Local/Export	**Export**
Standards	**IEC 60947-4-1, IEC 60947-5-1, UL508**
Certificates	**CE, UL, CCC**
Certificates	**KR, LR, BV, DNV, ABS, NK, RINA**
CHARACTERISTICS	
Number of poles	**3P**
Rated operational voltage [Ue]	**1000V**
Rated insulation voltage [Ui]	**1000V**
Rated withstand voltage [Uimp]	**8kV**
Rated frequency [Hz]	**50/60Hz**
Maximum operating rate in operating cycles per hour(AC3)	**1200**
Mechanical durability (mil. operations)	**5**
Electrical durability (mil. operations)	**1**
Rated operational current (AC-1)	**300A**
Motor power (AC-3)	**55kW at 200/240V**
Motor power (AC-3)	**90kW at 380/440V**
Motor power (AC-3)	**110kW at 500/550V**
Motor power (AC-3)	**110kW at 690V**
Motor power (AC-3)	**132kW at 1000V**
Motor power (AC-4)	**37kW at 200/240V**
Motor power (AC-4)	**75kW at 380/440V**
Rated operational current (AC-3)	**185A at 200/240V**
Rated operational current (AC-3)	**185A at 380/440V**
Rated operational current (AC-3)	**180A at 500/550V**
Rated operational current (AC-3)	**120A at 690V**
Rated operational current (AC-3)	**90A at 690V**
Rated operational current (AC-4)	**150A at 200/240V**
Rated operational current (AC-4)	**150A at 380/440V**
Type 2 Coordination	**See the Type 2 Coordination Table in the catalog**

Motor power (UL/CSA)	**15hp at 110~220V for 1 phase motors**
Motor power (UL/CSA)	**30hp at 220~240V for 1 phase motors**
Motor power (UL/CSA)	**60hp at 200~208V for 3 phase motors**
Motor power (UL/CSA)	**60hp at 220~240V for 3 phase motors**
Motor power (UL/CSA)	**125hp at 440~480V for 3 phase motors**
Motor power (UL/CSA)	**125hp at 550~600V for 3 phase motors**
Rated Short-time withstand current	**2000A at 1s**
Rated Short-time withstand current	**1500A at 10s**
Rated Short-time withstand current	**1000A at 30s**
Rated Short-time withstand current	**800A at 1min**
Rated Short-time withstand current	**520A at 3min**
Rated Short-time withstand current	**350A at 10min**
Rated Short-time withstand current	**320A at =15min**
Conductor size (AWG)	**1~4/0**
Conductor size (mm2)	**50~95**
The max. number of conductor	**50~95**
Conductor type	**Stranded**
Conductor charateristic	**75? Cu stranded wire**
Main terminal size	**M10**
Crimp terminal (mm)	**M10**
Torque (lb-in)	**M10**
Torque (Nm)	**M10**
Torque (kgf.cm)	**M10**
ENVIRONMENT	
Degree of protection	**IP00**
Ambient air temperature	**-30? ~ +65? at storage**
Ambient air temperature	**-5? ~ +55? at operation (AC type)**
Operating altitude	**3000m(8900ft)**
Shock resistance (1/2 sin wave=11ms)	**8G at opened**
Shock resistance (1/2 sin wave=11ms)	**10G at closed**
Vibration resistance (Conforming to IEC68-2-6) (5~300Hz)	**2G at opened**
Vibration resistance (Conforming to IEC68-2-6) (5~300Hz)	**4G at closed**
Flame resistance	**V0 at conforming to UL94**
Flame resistance	**960? at conforming to IEC695-2-1**
REACH	**Yes**
RoHS	**Yes**
WEEE	**Yes**
DIMENSIONS	
Weight	**5kg**
Size width	**138mm / 5.43inch**
Size height	**203mm / 7.99inch**
Size depth	**185.1mm / 7.29inch**
Drawings	**MC-185a.png**
CONTROL COIL	
Control voltage	**AC100-240V 50/60Hz, DC100-220V**
Control voltage limit [Uc]	**85~110%**
Consumption at 20℃	**110VA at inrush**
Consumption at 20℃	**18VA at holding**
Heat dissipation	**2.7W at holding**
Operating time	**20~40ms at closing**
Operating time	**50~70ms at opening**
APPLICABLE ACCESSORIES	
Applicable Accessories	**Metasol MS_43.png**