



Product Overview

EKC2-M series AC contactor with novel appearance and compact structure is suitable for using starting & controlling the AC motor frequently, switching on and off the circuit at a long distance. It is used in combination with thermal relay to compose a magnetic motor starter.

Standard: IEC 60947-1, IEC 60947-4-1.

Type Designation

EK	C	2	-	09	10	M	/	Z
↓	↓	↓		↓	↓	↓		↓
①	②	③		④	⑤	⑥		⑦
Code	Meaning			Code	Meaning			
①	Company code			⑤	Number of contacts (reversible contactors represent the types and quantities of contacts for a single product) 10: 3NO main contacts+1NO auxiliary contact 01: 3NO main contacts+1NC auxiliary contact 04: 4NO main contacts 08: 2NO and 2NC main contacts			
②	Contactor			⑥	M represents mini contactor			
③	Design sequence NO.			⑦	Z represents DC operation, N represents reversible AC contactor			
④	Rated current (380V/400V, AC3): 6A, 9A, 12A							

Operating and Installation Conditions

Type	Operating and Installation Conditions
Installation category	III
Pollution level	3
Certification	CE, CB, TUV
Protection degree	IP20
Ambient temperature	limit of temperature: -35°C~+70°C, normal temperature: -5°C~+40°C, The average no more than +35°C within 24 hours. If not in normal operating temperature range, please refer to "Instructions for abnormal environment"
Altitude	≤2000m
Ambient temperature	The maximum temperature of 70 degrees, the air relative humidity not exceed 50%, under lower temperature can allow for higher relative humidity. If the temperature is 20°C, the air relative humidity could up to 90%, Special measures should be taken for occasional condensation due to humidity changes.
Installation position	Inclination between installation surface and vertical surface should not exceed ±5°
Shock vibration	Products should be installed and used without significant shake, shock and vibration place.

Technical Data

Type		EKC2-06M	EKC2-09M	EKC2-12M
Main circuit characteristic				
Poles			3P/4P	
Main contact			3NO	
Rated insulation voltage(Ui)(V)			690V	
Rated operating voltage(Ue)(V)			380/400V; 660/690V	
Rated thermal current(Ith), AC-1			20	
Rated operation current(Ie)(A)	AC-3, 380/400V	6	9	12
	AC-3, 660/690V	3.8	4.9	4.9
	AC-4, 380/400V	6	9	9
	AC-4, 660/690V	3.8	4.9	4.9
Rated operational power(Pe)(A)	AC-3, 380/400V	2.2	4	5.5
	AC-3, 660/690V	3	4	4
Mechanical life($\times 10^3$ times)			1200	
Electrical life ($\times 10^3$ times)	AC-3		120	
	AC-4		See electrical life curve	
Frequency of operation (time/h)	AC-3		1200	
	AC-4		300	
Control circuit characteristics				
Rated control voltage (Us)	50Hz		24V,36V,48V,110V,127V,220V,380V,415V	
	50/60Hz		24V,36V,48V,110V,127V,220V,380V,415V	
	DC		12V,24V,36V,48V,110V,127V,220V	
Allowed control circuit voltage	Operation	Installation inclination angle $\pm 22.5^\circ$: (85%~110%)Us; Installation inclination angle $\pm 5^\circ$: 70%~120%		
	Release(AC)	Installation inclination angle $\pm 22.5^\circ$: (20%~75%)Us; Installation inclination angle $\pm 5^\circ$: 20%~60%		
	Release(DC)	Installation inclination angle $\pm 22.5^\circ$: (10%~75%)Us; Installation inclination angle $\pm 5^\circ$: 10%~60%		
Power consumption of coil	Actuation(VA)		20-40	
	Keep(VA)		9.5	
	Consumption(W)		1-3	
Connecting capability of main circuit terminal				
Flexible wire No terminal	1 wire(mm ²)		1~4	
	2 wire(mm ²)		1~4	
Flexible wire With terminals	1 wire(mm ²)		1~4	
	2 wire(mm ²)		1~2.5	
Hard wire No terminal	1 wire(mm ²)		1~4	
	2 wire(mm ²)		1~4	
Fastening torque (N.m)			1.2	
Auxiliary contacts				
Built-in auxiliary contact			1NO/1NC	
Rated thermal current (Ith)			10A	
Rated operating voltage (Ue)	AC		380/400V	
	DC		220V	
Rated control capacity	AC-15		Ue/Ie: AC380V/400V/1.5A; Ith: 10A	
	DC-13		Ue/Ie: DC220V/0.3A	

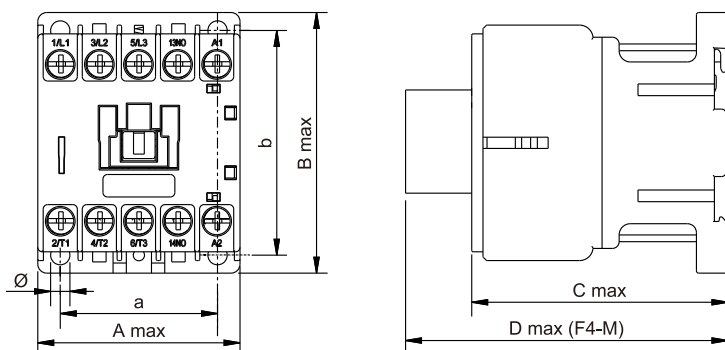
EKC2-M



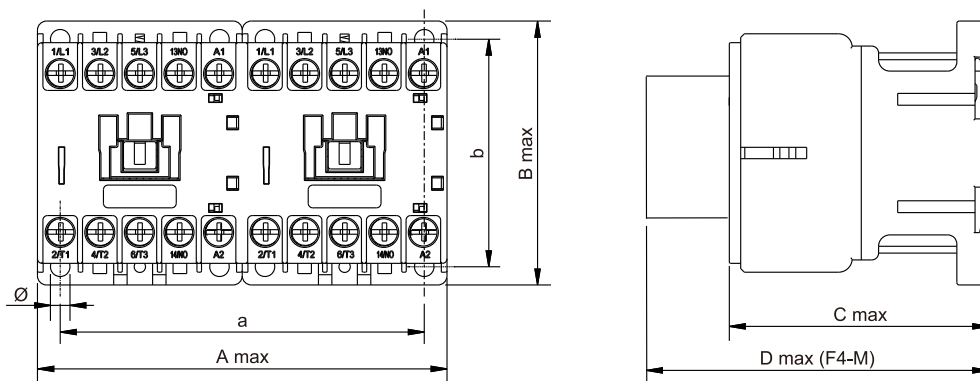
Mini Contactor 6~12A

Standard_ IEC60947-1
IEC60947-4-1

Dimension(mm)



Model	A Max	B Max	C Max	D Max	a	b	Ø
EKC2-06M~12M	45.5	59	58	94	35±0.35	50±0.48	4.2
EKC2-06M/Z~12M/Z	45.5	59	70	106	35±0.35	50±0.48	4.2



Model	A Max	B Max	C Max	D Max	a	b	Ø
EKC2-06M/N~12M/N	91	59	58	94	80±0.35	50±0.48	4.2
EKC2-06M/Z/N~12M/Z/N	91	59	70	106	80±0.35	50±0.48	4.2



EKC2-M




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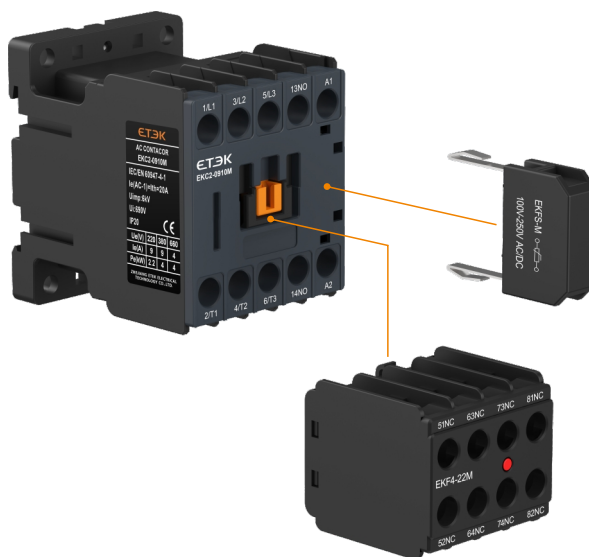
Auxiliary Contact Group

	Model	Contact number
	EKF4-20M	2NO
	EKF4-11M	1NO+1NC
	EKF4-02M	2NC
	EKF4-40M	4NO
	EKF4-31M	3NO+1NC
	EKF4-22M	2NO+2NC
	EKF4-13M	1NO+3NC
	EKF4-04M	4NC

Surge Suppression Module

	Model	Contact number
	EKFS-M	AC/DC: 24-48V AC/DC: 110-240V AC/DC: 380-440V

Mounting Sketch Map



Selection Table

Motor power kW		Maximum operation current A	Number of contacts contained in the contactor body		Contactor model
380/400V	660/690V		AC-3 380/400V	NO	
2.2	3	6	1	0	EKC2-0610M
2.2	3	6	0	1	EKC2-0601M
2.2	3	6	0	0	EKC2-0604M
2.2	3	6	0	0	EKC2-0608M
4	4	9	1	0	EKC2-0910M
4	4	9	0	1	EKC2-0901M
4	4	9	0	0	EKC2-0904M
4	4	9	0	0	EKC2-0908M
5.5	4	12	1	0	EKC2-1210M
5.5	4	12	0	1	EKC2-1201M
5.5	4	12	0	0	EKC2-1204M
5.5	4	12	0	0	EKC2-1208M

Coil Voltage Specification Table

AC(V) 50Hz	24	36	48	110	127	220	380	415
AC(V) 60Hz	24	36	48	110	127	220	380	415
AC(V) 50/60Hz	24	36	48	110	127	220	380	415
DC(V)	12	24	36	48	110	127	220	-

Instructions For Use of Correction Factors In High Altitude Areas

Altitude (m)	2000	3000	4000
Rated impulse withstand voltage correction factor	1	0.88	0.78
Rated operation current correction factor	1	0.92	0.90

Instructions For Use Under Abnormal Ambient Temperature

Ambient temperature (°C)	55	60	65	70
Correction factor	1	0.93	0.875	0.75