



Product Overview

EKC2F-115~800 series AC contactors (hereinafter referred to as contactors) are mainly used for AC 50HZ (or 60HZ), with a rated insulation voltage of 1000V, and a rated working current of 115 when the rated working voltage is 415V under the AC-3 use category. In circuits of ~800A, it is used for long-distance making and breaking of circuits, frequent starting and controlling AC motors; and it can be combined with a suitable thermal overload relay to form an electromagnetic starter to protect circuits that may be overloaded.

EKC2F-1000~2600 AC contactor (hereinafter referred to as contactor) is mainly used for remote power supply in AC circuits under AC-1 usage category, AC 50Hz (or 60Hz), rated working voltage to 690V, rated working current 1000~2600A Distance makes and breaks circuits.

Standard: IEC60947-4-1, IEC60947-5-1.

Type Designation



Code	Meaning
①	Company code
②	Contactor
③	Design sequence NO.
④	High current

Code	Meaning
⑤	Rated operational current: 115A,150A,185A,225A,265A,330A,400A,500A,630A, 800A,1000A,1250A,1400A,1700A,2100A,2600A
⑥	04: Main circuit 4P; Blank: Main circuit 3P
⑦	Coil voltage

Description

Ambient temperature	-25°C~+40°C
Altitude	≤3000m
Ambient humidity	The ultimate humidity does not exceed 95%, the duration does not exceed 24 hours, and measures are required to prevent condensation; When the ambient temperature is high, the humidity is required to be low. For example, when the temperature exceeds +40°C, the humidity is required to not exceed 50%.
Pollution level	3 level
Protection level	IP20
Installation category	III
Installation direction	Installed vertically, and the inclination between the installation surface and the vertical surface is ≤30°
Installation method	Screw installation

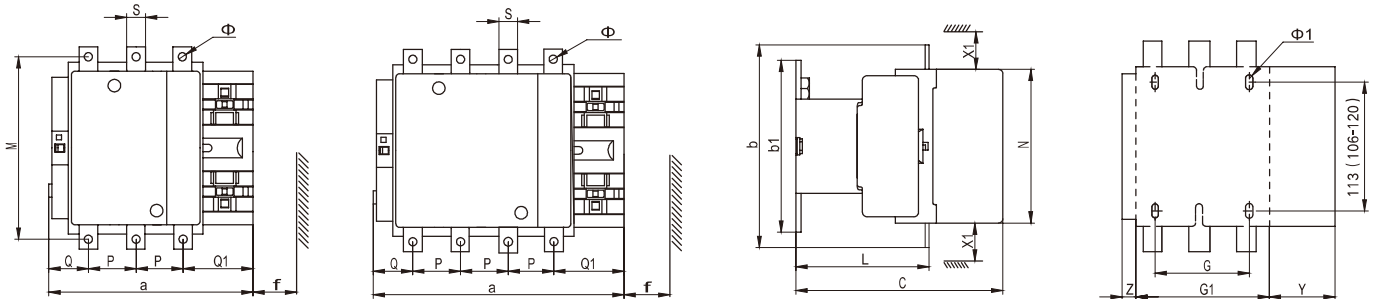
Technical Data

Type		EKC2F-115	EKC2F-150	EKC2F-185	EKC2F-225	EKC2F-265	EKC2F-330	EKC2F-400	EKC2F-500	EKC2F-630	EKC2F-800
Main circuit characteristic											
Poles		3P, 4P									
Rated impulse withstand voltage (U _{imp})(kV)		8									
Rated insulation voltage (U _i)(V)		1000									
Rated operating voltage (U _e)(V)		380/415; 660/690									
Rated thermal current (I _{th})(A)		200	200	275	280	350	360	500	580	850	850
Rated operation current (I _e)(A)	AC-3, 415V	115	150	185	225	265	330	400	500	630	800
	AC-3, 690V	86	107	118	135	170	225	305	335	460	470
	AC-4, 415V	52	60	79	85	105	117	138	147	188	195
	AC-4, 690V	49	57	69	82	98	107	135	145	170	175
Rated turn-on capacity		10×I _e (AC-3), 12×I _e (AC-4), 1.5×I _e (AC-1)									
Rated breaking capacity		8×I _e (AC-3), 10×I _e (AC-4), 1.5×I _e (AC-1)									
Mechanical life(×10 ⁴ times)		300									
Electrical life (×10 ⁴ times)	AC-3	80	80	50	50	50	50	30	20	20	20
	AC-4	15	15	15	15	15	15	8	8	5	3
Frequency of operation (h ⁻¹)	AC-3	600	600	600	600	300	300	300	300	300	300
	AC-4	150	150	150	150	150	150	150	150	150	150
Average impedance per pole at I _{th} and 50Hz(mΩ)		0.37	0.35	0.33	0.32	0.3	0.28	0.26	0.18	0.12	0.12
Shock resistance 1/2 sine wave= 11ms (gn)	Contactors open	9	9	7	7	6	6	6	9	9	6
	Contactors close	15	15	15	15	15	15	15	15	15	15
Vibration resistance 5...300 Hz (gn)	Contactors open	2	2	2	2	2	2	1.5	2	2	2
	Contactors close	6	6	6	6	5	5	5	4	4	4
Control circuit characteristics											
Rated control voltage (U _c)		24,36,48,110,220, 240,380,415,480 (50Hz,50/60Hz)		110,200,220,230, 240,380,400,415 (50Hz,50/60Hz)		110,220,230, 380,400 (50/60Hz)		110,220,230,380 (50/60Hz)			
Operation voltage range		(85%~110%)U _c									
Release voltage range		(20%~75%)U _c									
Power consumption of coil	Operation(VA)	≤550(50Hz) ≤855(50/60Hz)		≤805(50Hz) ≤1180(50/60Hz)		≤650	≤650	≤1075	≤1100	≤1650	≤1700
	Keep(VA)	≤55(50Hz) ≤9(50/60Hz)		≤64(50Hz) ≤14(50/60Hz)		≤15	≤15	≤22	≤24	≤27	≤27
Coil operation time(ms)		23~35		20~35		40~65	40~65	40~75	40~75	40~80	60~80
Coil release time(ms)		5~15(50Hz) 130(50/60Hz)		7~15(50Hz) 130(50/60Hz)		100~170	100~170	100~170	100~170	100~200	150~180
Connecting capability of main circuit											
Cable	Quantity	1	1	1	1	1	1	2	2	/	/
	Size (mm ²)	95	120	150	185	240	250	150	240	/	/
Copper row	Quantity	2	2	2	2	2	2	2	2	2	2
	Size (mm)	20×3	25×3	25×3	32×4	32×4	30×5	30×5	40×5	60×5	60×5
Connecting capability of control circuit											
Number of flexible wire 1 or 2 (mm ²)		2.5									
Number of hard wire 1 (mm ²)		4									
Tightening torque (N.m)		1.2									

Type	EKC2F-1250	EKC2F-1000	EKC2F-1400	EKC2F-1700	EKC2F-2100	EKC2F-2600	
Main circuit characteristic							
Poles	3P, 4P						
Rated impulse withstand voltage (Uimp)(kV)	12						
Rated insulation voltage (Ui)(V)	1000						
Rated operating voltage (Ue)(V)	660/690						
Rated thermal current (Ith)(A)	1250	1000	1400	1700	2100	2600	
Rated operating current (Ie)(A) (open installation) AC-1, Ue≤690V, θ≤40°C	1250	1000	1400	1700	2100	2600	
Rated turn-on capacity	1.5×Ie (AC-1)						
Rated breaking capacity	1.5×Ie (AC-1)						
Mechanical life(×10 ⁴ times)	100	100	60	60	60	60	
Maximum mechanical operating frequency	600 times/h						
Electrical life AC-1 (×10 ⁴ times)	8	8	7	7	4	3	
Frequency of operation AC-1 (h ⁻¹)	200 times/h						
Average impedance per pole At Ith and 50Hz(mΩ)	0.12	0.12	0.1	0.1	0.1	0.1	
Shock resistance 1/2 sine wave=11ms (gn)	Contactor open	6					
	Contactor close	15					
Vibration resistance 5...300 Hz (gn)	Contactor open	2					
	Contactor close	4					
Control circuit characteristics							
Rated control voltage (Uc)	110,220,230,380 (50/60Hz)	110, 110~120, 220, 220~230, 240, 277, 380, 380~400, 415~400 (50/60Hz)					
Operation voltage range	(85%~110%)Uc						
Release voltage range	(20%~75%)Uc						
Power consumption of coil	Operation(VA)	≤1700	≤2200	≤2200	≤2200	≤2200	≤2200
	Keep(VA)	≤27	≤44	≤44	≤44	≤44	≤44
Coil operation time(ms)	60~80	40~75	40~75	40~75	40~75	40~75	
Coil release time(ms)	150~180	100~170	100~170	100~170	100~170	100~170	
Connecting capability of main circuit							
Copper row	Quantity	2	2	3	3	4	3
	Size (mm)	100×5	100×5	100×5	100×5	100×5	100×10
Connecting capability of control circuit							
Number of flexible wire 1 or 2 (mm ²)	2.5						
Number of hard wire 1 (mm ²)	4						
Tightening torque (N.m)	1.2						

Dimension(mm)

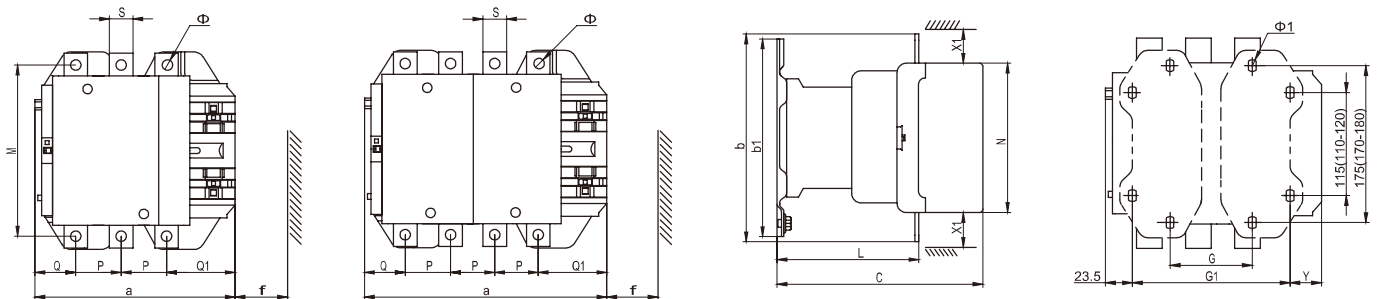
EKC2F-115~330



Model	a	p	Q	Q1	S	Φ	f	b	b1	M	N	c	L	G	Φ1	G1	Z	Y	X1	
																			≤500V	>500V
EKC2F-115	163.5	37	29.5	60	15	6.5	131	162	137	147	124	171	107	80	6.5	106	13.5	44	10	15
EKC2F-11504	200.5	37	29.5	60	15	6.5	131	162	137	147	124	171	107	80	6.5	143	13.5	44	10	15
EKC2F-150	163.5	40	26	57.5	20	9	131	170	137	150	124	171	107	80	6.5	106	13.5	44	10	15
EKC2F-15004	200.5	40	26	55.5	20	9	131	170	137	150	124	171	107	80	6.5	143	13.5	44	10	15
EKC2F-185	168.5	40	29	59.5	20	9	130	174	137	154	127	181	113.5	80	6.5	111	13.5	44	10	15
EKC2F-18504	208.5	40	29	59.5	20	9	130	174	137	154	127	181	113.5	80	6.5	151	13.5	44	10	15
EKC2F-225	168.5	48	21	51.5	25	11	130	197	137	172	127	181	113.5	80	6.5	111	13.5	44	10	15
EKC2F-22504	208.5	48	17	47.5	25	11	130	197	137	172	127	181	113.5	80	6.5	151	13.5	44	10	15
EKC2F-265	201.5	48	39	66.5	25	11	147	203	145	178	147	213	141	96	6.5	140	20.5	38	10	15
EKC2F-26504	224.5	48	34	66.5	25	11	147	203	145	178	147	213	141	96	6.5	186	20.5	38	10	15
EKC2F-330	213	48	43	74	25	11	147	206	145	181	158	219	145	96	6.5	154.5	20.5	38	10	15
EKC2F-330	261	48	43	74	25	11	147	206	145	181	158	219	145	96	6.5	202.5	20.5	38	10	15

Note: For the space required to replace the coil, X1 is the minimum electrical gap (flashover distance), which is the same as below.

EKC2F-400~500



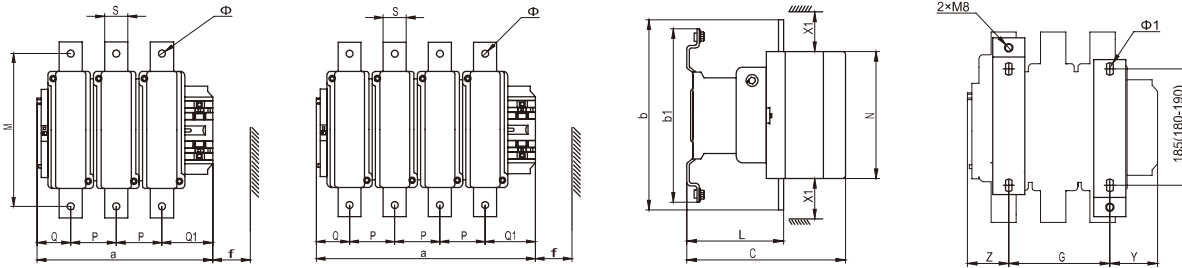
Model	a	p	Q	Q1	S	Φ	f	b	b1	M	N	c	L	G	G1	Φ1	Y	X1	
																		≤500V	>500V
EKC2F-400	213	48	43	74	25	11	151	206	209	181	158	219	145	80 (66-102)	170 (156-192)	8.5	19.5	15	20
EKC2F-40004	261	48	43	74	25	11	151	206	209	181	158	219	145	80 (66-150)	170 (156-240)	8.5	67.5	15	20
EKC2F-500	233	55	46	77	30	11	169	238	209	208	172	232	146	80 (66-120)	170 (156-210)	8.5	39.5	15	20
EKC2F-50004	288	55	46	77	30	11	169	238	209	208	172	232	146	140 (66-175)	230 (156-265)	8.5	34.5	15	20

EKC2F

Contactor 115~2600A

Standard_IEC60947-4-1

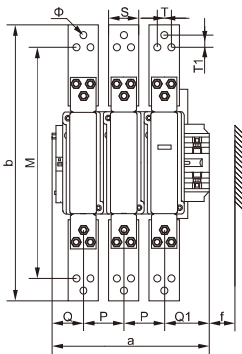
EKC2F-630~800



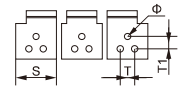
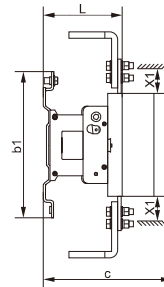
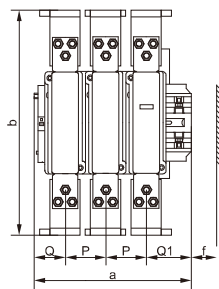
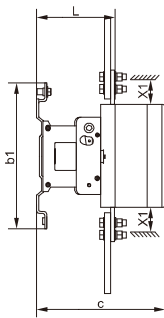
Model	a	p	Q	Q1	S	Φ	f	b	b1	M	N	c	L	G	Φ1	Z	Y	X1	
																		≤500V	>500V
EKC2F-630 EKC2F-800	309	80	60	89	40	13	201	304	280	264	202	255	155	180 (100-195)	10.5	60.5	68.5	20	30
EKC2F-63004 EKC2F-80004	389	80	60	89	40	13	201	304	280	264	202	255	155	240 (150-275)	10.5	60.5	88.5	20	30

EKC2F-1250

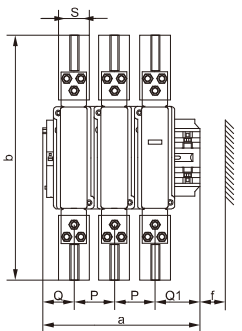
I type overall dimension



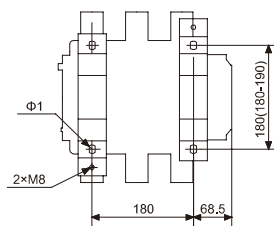
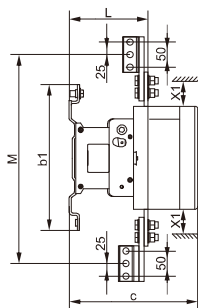
C type overall dimension



T type overall dimension



Installation Dimension



EKC2F-1250	a	p	Q	Q1	S	g	T	T1	Φ	f	b	b1	M	c	L	Φ1	X1	
																	≤500V	>500V
I type row connection	309	80	60	89	60	/	28	24	13	151	512	280	424	251	155	10.5	20	30
C type row connection	309	80	60	89	80	20	28	24	13	151	462	280	/	251	155	10.5	20	30
T type row connection	309	80	60	89	50	/	/	/	13	151	442	280	370.5	251	155	10.5	20	30

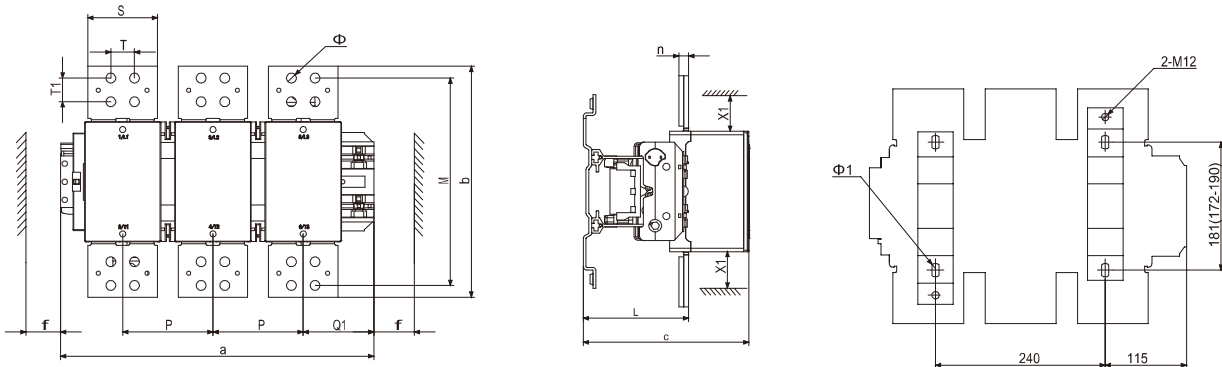
Note: Choose any one of the above three connection rows.

EKC2F

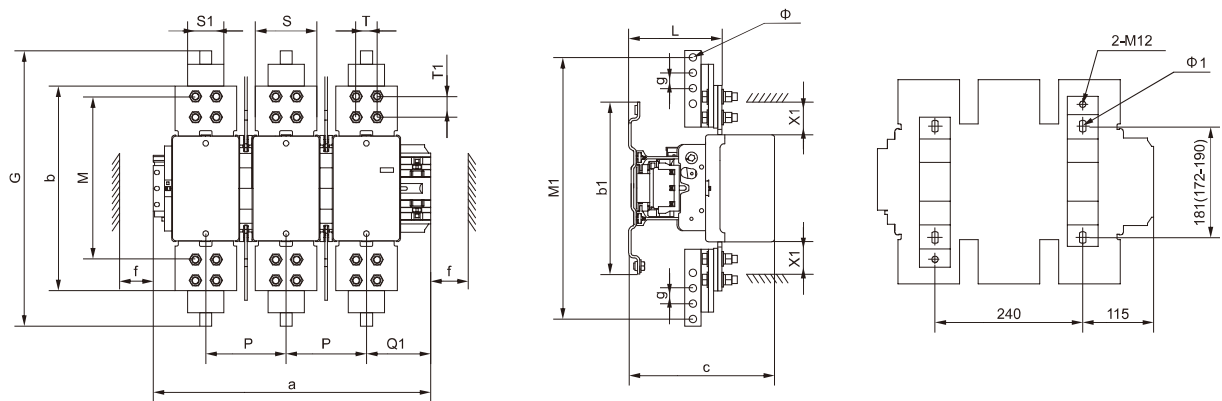
Contactor 115~2600A

Standard_IEC60947-4-1

EKC2F-1000~2100



EKC2F-2600



Model	a	b	c	L	n	p	Q1	M	Φ	Φ1	S	S1	T	T1	f	G	g	M1	X1 (Ue≤690V)
EKC2F-1000	448	332	238	151	12	130.5	104	298	13	10.5	100	/	34	34	170	/	/	/	100
EKC2F-1400	448	332	238	151	12	130.5	104	298	13	10.5	100	/	34	34	170	/	/	/	100
EKC2F-1700	448	332	238	151	12	130.5	104	298	13	10.5	100	/	34	34	170	/	/	/	100
EKC2F-2100	448	332	238	151	12	130.5	104	298	13	10.5	100	/	34	34	170	/	/	/	100
EKC2F-2600	448	332	238	148	20	130	104	298	13	10.5	100	60	34	34	170	480	25	458	100