EKMS2 MPCB

Motor Protection Circuit Breaker ---------- Standard_IEC60947-2
IEC60947-4-1


EKMS2-32


EKMS2-32P


EKMS2-32R


EKMS2-80


EKMS2-80P

Description

- Electric value: AC690V, 32A, 80A;
- Standard: IEC/EN 60947-2, IEC60947-4-1

Type Designation

EK	S	2	-	32	01
①	②	③		④	⑤

Code	Meaning
①	Company code
②	AC motor starter
③	Design sequence Number

Code	Meaning
④	Frame Size rated current (A)
⑤	Code of rated current

Operating Condition

Temperature	−5°C~+40°C, average temperature in 24 hours not exceed +35°C
Altitude	not exceed 2000m
Air conditions	At mounting site, relative humidity not exceed 50% at the max temperature of +40°C, higher relative humidity is allowable under lower temperature,for example, RH could be 90% at +20°C.
Pollution grade	Grade III
Release grade	10A(CS2-32); 10A(CS2-80)
Rated operational system	Continuous operational system
Mounting conditions	The inclination between the mounting plane and the vertical plane shall not exceed 5°; The product shall be installed and operated at a place without obvious shake, Impact and vibration.

Technical Data

Over-load protection properties

Series No.	Multiple of setting current	Initial status	Time		Expected results	Ambient temperature
1	1.05	Cold status	t≥2h		Non-tripping	+20°C±2°C
2	1.20	Heat status (right after test.1)	t<2h		Tripping	+20°C±2°C
3	1.50	Heat status (right after test.1)	Tripping class	10A t<2min 10 t<4min	Tripping	+20°C±2°C
4	7.20	Cold status	Tripping class	10A 2s<t≤10s 10 4s<t≤10s	Tripping	+20°C±2°C

Phase failure protection properties

Series No.	Multiple of setting current		Initial status	Time	Expected results	Ambient temperature
	Any 2 phase	The other phase				
1	1.0	0.9	Cold status	t≥2h	Non-tripping	+20°C±2°C
2	1.15	0	Heat status (right after test.1)	t<2h	Tripping	+20°C±2°C

Temperature compensation properties

Series No.	Multiple of setting current	Initial status	Time	Expected results	Ambient temperature
1	1.0	Cold status	t≥2h	Non-tripping	+40°C±2°C
2	1.2	Heat status (right after test.1)	t<2min	Tripping	+40°C±2°C
3	1.05	Cold status	t≥2h	Non-tripping	-50°C±2°C
4	1.3	Heat status (right after test.1)	t<2min	Tripping	-50°C±2°C

Model of overload relay	Code	Rated current (A)	Rated ultimate short-circuit breaking capacity Icu(kA)			Rated service short-circuit breaking capacity Ics(kA)			Standard rated power of three-phase motor (kW)		
			230/240V	400/415V	660/690V	230/240V	400/415V	660/690V	230/240V	400/415V	660/690V
EKMS2-32	3201	0.1~0.16	100	100	100	100	100	100	-	-	-
	3202	0.16~0.25	100	100	100	100	100	100	-	-	-
	3203	0.25~0.4	100	100	100	100	100	100	-	-	-
	3204	0.4~0.63	100	100	100	100	100	100	-	-	0.37
	3205	0.63~1	100	100	100	100	100	100	-	-	0.55
	3206	1~1.6	100	100	100	100	100	100	-	-	1.1
	3207	1.6~2.5	100	100	3	100	100	2.25	0.37	0.75	1.5
	3208	2.5~4	100	100	3	100	100	2.25	0.75	1.5	3
	3210	4~6.3	100	100	3	100	100	2.25	1.1	2.2	4
	3214	6~10	100	100	3	100	100	2.25	2.2	4	7.5
	3216	9~14	100	15	3	100	7.5	2.25	3	5.5	9
	3220	13~18	100	15	3	100	7.5	2.25	4	9	11
	3221	17~23	50	15	3	50	6	2.25	5.5	11	15
	3222	20~25	50	15	3	50	6	2.25	5.5	11	18.5
	3232	24~32	50	15	3	50	6	2.25	7.5	12.5	22
EKMS2-80	8025	16~25	-	15	-	-	7.5	-	5.5	11	-
	8040	25~40	-	15	-	-	7.5	-	11	22	-
	8063	40~63	-	15	-	-	7.5	-	15	33	-
	8080	56~80	-	15	-	-	7.5	-	22	45	-

Accessories

Under-Voltage Release

Rated insulation voltage Ui(V)	Voltage range of operation	Model	Specification
690	35%~70%Ue	EKMS2-UV110	110~115V 50Hz
690	35%~70%Ue	EKMS2-UV127	127V 60Hz
690	35%~70%Ue	EKMS2-UV220	220~240V 50Hz
690	35%~70%Ue	EKMS2-UV380	380~400V 50Hz
690	35%~70%Ue	EKMS2-UV440	440V 60Hz

Shunt Release

Rated insulation voltage Ui(V)	Voltage range of operation	Model	Specification
690	70%~110%Ue	EKMS2-SH110	110~115V 50Hz
690	70%~110%Ue	EKMS2-SH127	127V 60Hz
690	70%~110%Ue	EKMS2-SH220	220~240V 50Hz
690	70%~110%Ue	EKMS2-SH380	380~400V 50Hz
690	70%~110%Ue	EKMS2-SH440	440V 60Hz

Instantaneous auxiliary contact

Rated insulation voltage Ui(V)	Conventional heating current Ith(A)	Model	Configuration
250	2.5	EKMS2-AE20	2NO
250	2.5	EKMS2-AE11	1NO+1NC

EKMS2-AN20 EKMS2-AN11 EKMS2-AU20 EKMS2-AU11

Rated insulation voltage Ui(V)	Conventional heating current Ith(A)	Model	Configuration	Starter matched
690	6	EKMS2-AN20	2NO	EKMS2-32
690	6	EKMS2-AN11	1NO+1NC	
690	6	EKMS2-AU20	2NO	EKMS2-80
690	6	EKMS2-AU11	1NO+1NC	

Fault signal contact and instantaneous auxiliary contact

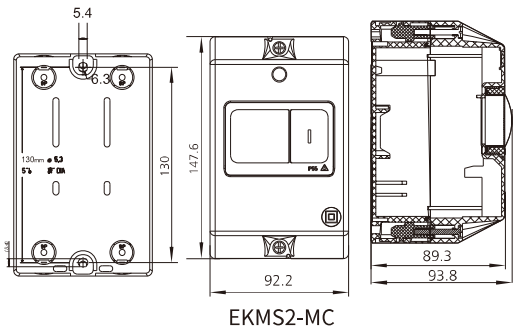
Rated insulation voltage Ui(V)	Conventional heating current Ith(A)		Model	Configuration
	Instantaneous auxiliary contact	Fault signal contact		
690	6	2.5	EKMS2-FA0110	1NC+1NO
690	6	2.5	EKMS2-FA0101	1NC+1NC
690	6	2.5	EKMS2-FA1010	1NO+1NO
690	6	2.5	EKMS2-FA1001	1NO+1NC

Application class, rated operational voltage and tated operational current of instantaneous auxiliary contact

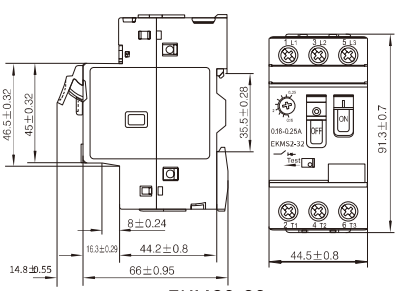
Utilization category	AC-15				DC-13		
Rated operational voltage Ue(V)	24	48	110/127	230/240	24	48	60
Rated operational current Ie(A)	2	1.25	1	0.5	1	0.3	0.15
Normal operational power P(W)	48	60	127	120	24	15	9

EKMS2-MC Installation box without pushbutton	IP55

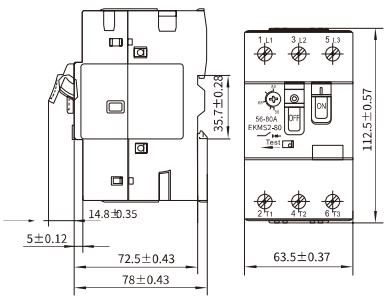
Dimension(mm)



EKMS2-MC



EKMS2-32



EKMS2-80