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ZHEJIANG ETEK
ELECTRICAL TECHNOLOGY CO.,LTD.

Always for your safety

COMPANY INTRODUCTION

Zhejiang ETEK Electrical Technology Co., Ltd. (Abbreviation: ETEK Electric) is a professional manufacturing company dedicated to the research, development, production, and sales of low-voltage electrical appliances. The company was established in 2011 and is located in Wenzhou City, Zhejiang Province. At present, the company has 40K sqm of modern manufacturing bases in Wenzhou and Wuhu with over 500 employees, including over 50 R&D and technical personnel. ETEK Electric has multiple production workshops for mold design, parts manufacturing, welding, and assembly. Additionally, they have multiple automated production lines for MCB and RCCB. Our products include MCB, RCCB, RCBO, AFDD, MCCB, ACB, EV Chargers, Photovoltaic DC products, etc., which can meet the needs of different countries and are widely used in fields such as residential, commercial, and industrial.

ETEK Electric has passed ISO9001 quality management system and environmental management system certification. The company have built our own low-voltage electrical testing center, and most of the testing items can meet the requirements of international IEC standards, in addition, our products have obtained international CB, TUV, VDE, CE, RoHS and other quality certificates.

ETEK Electric constantly masters and breaks through the core technology of circuit breakers, with more than 100 national patents. Focusing on independent brand construction is crucial for the company's development. The "ETEK" trademark is registered in over 80 countries. Products are exported to over 60 countries and regions including the European Union, South America, the Middle East, Africa, and Southeast Asia.

We also support OEM, ODM, OBM, SKD, CKD and other business cooperation models, and provide customers with a full range of services covering market cultivation, technical training, and factory construction.

ETEK Electric has been adhering to the business policy of "Growth", "Quality", "Efficiency", and "Innovation". In 2023, ETEK Electric has formulated the fifth 3-year strategic plan, which specifies the three major initiatives of expanding the production scale, enhancing the new energy market share, and expanding the independent brand, to realize the annual revenue target of $50 million by 2026.

Looking forward to the future, ETEK Electric will be committed to becoming a globally renowned manufacturer in the power distribution and electrical industry, safeguarding the power safety of global customers, and helping the development of green and digital energy.


Wenzhou Factory


Wuhu Factory

WORKSHOPS





OEM & ODM BUSINESS

OEM & OEM

Customer request provide quotation

Research & development product design

Comfirmation PO & arrange advanced payment

Planning production & raw material inspection

Arrange production & quality inspection

Shipment ready & arrange balance payment

Delivery to customer

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ETEK MCB Product Selection Table

Products Overview of Circuit Breakers

Model No.	S1(Series No.1)					
	EKM1-63S	EKM1-63	EKM1-63H	EKM1-40N	EKM1-125H	EKM1-63DC
Breaking Capacity	4.5kA	6kA	10kA	6kA	15kA	6kA
Rated currents In	1-63A	1-63A	1-63A	1-40A	63-125A	1-63A
Protection: Overcurrent and short circuit						
Standard	IEC60898-1	IEC60898-1	IEC60898-1	IEC60898-1	IEC60898-1 IEC60947-2	IEC60947-2
Number of poles	1P,2P,3P,4P (1P+N),(3P+N)	1P,2P,3P,4P (1P+N),(3P+N)	1P,2P,3P,4P (1P+N),(3P+N)	1P+N	1P,2P,3P,4P (1P+N),(3P+N)	1P,2P,,4P
Rated voltage(V)	240/415V~	240/415V~	240/415V~	240/415V~	240/415V~	1: 250VDC,2: 500VDC, 4: 1000VDC
Insulation voltage Ui	500V	500V	500V	500V	500V	500V
Tripping curve	B,C,D	B,C,D	B,C,D	B,C	8-12In	8-12In
Type	AC	AC	AC	AC	AC	DC
Certificate	CB CE	CB CE UK CA SAA	CB CE UK CA SAA	CB CE UK CA BV	CB CE	CE
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ETEK MCB Product Selection Table

Products Overview of Circuit Breakers

Model No.	S2(Series No.2)						
	EKM2-63X	EKM2-63	EKM2-63H	EKM2-40N	EKM1-125S	EKM2-125H	EKM1-125DC
Breaking Capacity	4.5kA	6kA	10kA	6kA	6kA	10kA	10kA
Rated currents In	1-63A	1-63A	1-63A	6-40A	63-125A	63-125A	80-125A
Protection: Overcurrent and short circuit							
Standard	IEC60898-1	IEC60898-1	IEC60898-1	IEC60898-1	IEC60898-1	IEC60898-1 IEC60947-2	IEC60947-2
Number of poles	1P,2P,3P,4P (1P+N),(3P+N)	1P,2P,3P,4P (1P+N),(3P+N)	1P,2P,3P,4P (1P+N),(3P+N)	1P+N	1P,2P,3P,4P (1P+N),(3P+N)	1P,2P,3P,4P (1P+N),(3P+N)	1P,2P,4P
Rated voltage(V)	240/415V~	240/415V~	240/415V~	230/240V~	240/415V~	240/415V~	1: 250VDC,2: 500VDC, 4: 1000VDC
Insulation voltage Ui	500V	500V	500V	500V	500V	500V	500V
Tripping curve	B,C,D	B,C,D	B,C,D	B,C,D	C,D	8-12In	8-12In
Type	AC	AC	AC	AC	AC	AC	DC
Certificate	CB CE	CB CE INMETRO UKCA	CB CE UKCA	CB CE UKCA BV	CB CE	CB CE	CE
Catalogue page No.	37	38	39	40	41	42	43

ETEK MCB Product Selection Table

Products Overview of Circuit Breakers

Model No.	S3(Series No.3)					Economic type	
	EKM3-63S	EKM3-63	EKM3-63H	EKM3-100	EKM3-125H	DZ47-63S	EKM2-125
Breaking Capacity	4.5kA	6kA	10kA	6kA	10kA	4.5kA	6kA
Rated currents In	1-63A	1-63A	1-63A	63-125A	63-125A	1-63A	25-125A
Protection: Overcurrent and short circuit							
Standard	IEC60898-1	IEC60898-1 IEC60947-2	IEC60898-1	IEC60898-1	IEC60898-1 IEC60947-2	IEC60898-1	IEC60947-2
Number of poles	1P,2P,3P,4P (1P+N),(3P+N)	1P,2P,3P,4P (1P+N),(3P+N)	1P,2P,3P,4P (1P+N),(3P+N)	1P,2P,3P,4P (1P+N),(3P+N)	1P,2P,3P,4P (1P+N),(3P+N)	1P,2P,3P,4P (1P+N),(3P+N)	1P,2P,3P,4P (1P+N),(3P+N)
Rated voltage(V)	240/415V~	240/415V~	240/415V~	240/415V~	240/415V~	240/415V~	240/415V~
Insulation voltage Ui	500V	500V	500V	500V	500V	500V	500V
Tripping curve	B,C,D	B,C	B,C,D	C,D	8-12In	B,C,D	8-12In
Type	AC	AC	AC	AC	AC	AC	AC
Certificate	CB CE	CB CE UKCA SAA	CB CE UKCA SAA	CB CE UKCA	CB CE UKCA	CB CE IMMETRO	CB CE
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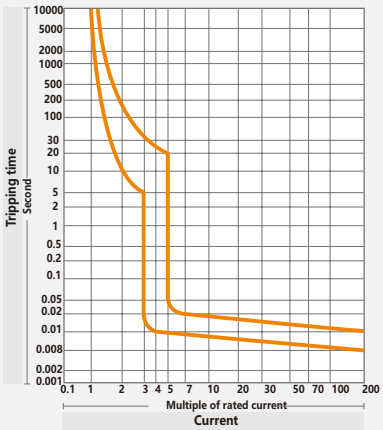
ETEK MCB Main Technical Parameters

Tripping Characteristic (IEC60898-1)

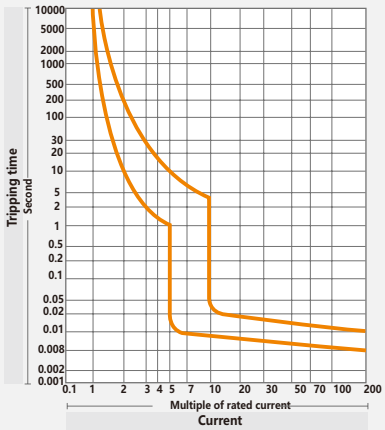
Curve	Rated current	Condition						
		Thermal release				Magnetic release		
		Non-tripping	Tripping	Non-tripping	Tripping time	Holding current	Tripping current	Tripping time
B	1-125A	1.13 × In		≤1h		3× In		≥0.1
			1.45 × In		<1h		5 × In	<0.1
C	1-125A	1.13 × In		≤1h		5× In		≥0.1
			1.45 × In		<1h		10 × In	<0.1
D	1-125A	1.13 × In		≤1h		10 × In		≥0.1
			1.45 × In		<1h		20 × In	<0.1

B curve



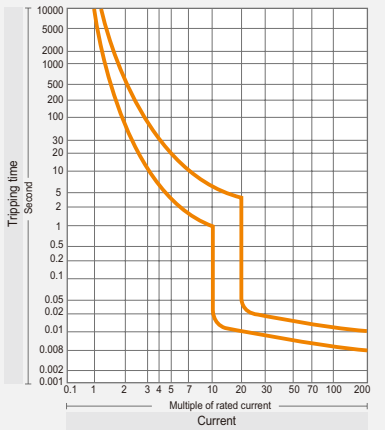
Universal use
- socket outlet, lighting device

C curve



Resistive & inductive loads with low inruch current
- lamp, high starting current motor

D curve



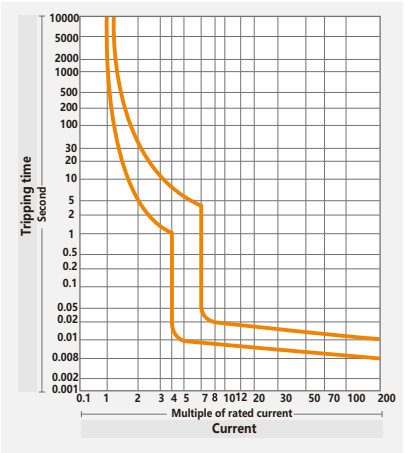
Loads with high inrush current
- transformer, solenoid valve, 2 pole motor

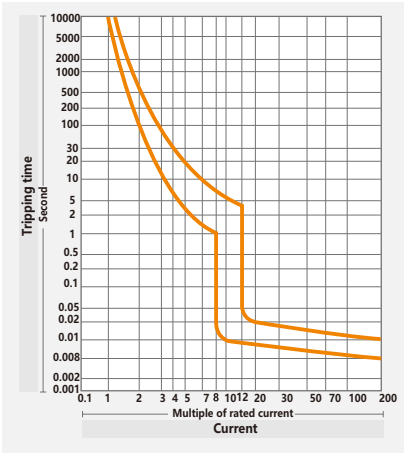
Temperature Derating Table

Rated current (A)	Correction factor for ambient temperature											
	-40℃	-30℃	-20℃	-10℃	0℃	10℃	20℃	30℃	40℃	50℃	60℃	70℃
1	1.33	1.29	1.25	1.2	1.15	1.11	1.05	1	0.94	0.88	0.82	0.75
2	2.67	2.58	2.49	2.4	2.31	2.21	2.11	2	1.89	1.76	1.63	1.49
3	4	3.9	3.7	3.6	3.5	3.3	3.2	3	2.8	2.6	2.4	2.2
4	5.3	5.2	5	4.8	4.6	4.4	4.2	4	3.8	3.5	3.3	3
5	6.7	6.5	6.31	6.1	5.8	5.5	5.25	5	4.7	4.3	4	3.7
6	8	7.7	7.5	7.2	6.9	6.6	6.3	6	5.7	5.3	4.9	4.5
10	13.3	12.9	12.5	12	11.5	11.1	10.5	10	9.4	8.8	8.2	7.5
16	21.3	20.7	20	19.2	18.5	17.7	16.9	16	15.1	14.1	13.1	11.9
20	26.7	25.8	24.9	24	23.1	22.1	21.1	20	18.9	17.6	16.3	14.9
25	33.3	32.3	31.2	30	28.9	27.6	26.4	25	23.6	22	20.4	18.6
32	42.7	41.3	39.9	38.5	37	35.4	33.7	32	30.2	28.2	26.1	23.9
40	53.3	51.6	49.9	48.1	46.2	44.2	42.2	40	37.7	35.3	32.7	29.8
50	66.7	64.5	62.4	60.1	57.7	55.3	52.7	50	47.1	44.1	40.8	37.3
63	84	81.3	78.6	75.7	72.7	69.6	66.4	63	59.4	55.6	51.4	47
80	106.4	103.2	100	96	92	88.8	84	80	75.2	70.4	65.6	60
100	133	129	125	120	115	111	105	100	94	88	82	75
125	166.3	161.3	156.3	150	143.8	138.8	131.3	125	117.5	110	102.5	93.8

Tripping Characteristic (IEC60947-2)

Current(A)		Rated current(A)	Thermal Release				Magnetic release	
			Non-tripping current(A)	Tripping current(A)	Non-tripping time(h)	Tripping time(h)	Holding time(S)	Tripping time(S)
10In±20%	8-12In	1-63	1.05In		≤1		≤0.2	
				1.30In		<1		<0.2
		80-125	1.05In		≤2		≤0.2	
				1.30In		<2		<0.2



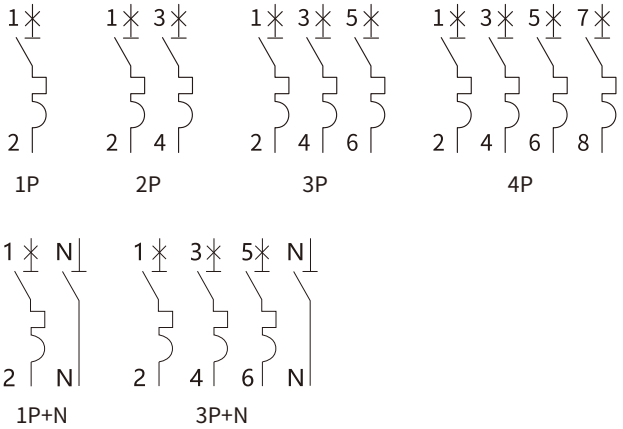


Temperature Derating Table

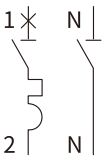
Rated current (A)	Correction factor for ambient temperature											
	-40℃	-30℃	-20℃	-10℃	0℃	10℃	20℃	30℃	40℃	50℃	60℃	70℃
1	1.33	1.29	1.25	1.2	1.15	1.11	1.05	1	0.94	0.88	0.82	0.75
2	2.67	2.58	2.49	2.4	2.31	2.21	2.11	2	1.89	1.76	1.63	1.49
3	4	3.9	3.7	3.6	3.5	3.3	3.2	3	2.8	2.6	2.4	2.2
4	5.3	5.2	5	4.8	4.6	4.4	4.2	4	3.8	3.5	3.3	3
5	6.7	6.5	6.31	6.1	5.8	5.5	5.25	5	4.7	4.3	4	3.7
6	8	7.7	7.5	7.2	6.9	6.6	6.3	6	5.7	5.3	4.9	4.5
10	13.3	12.9	12.5	12	11.5	11.1	10.5	10	9.4	8.8	8.2	7.5
16	21.3	20.7	20	19.2	18.5	17.7	16.9	16	15.1	14.1	13.1	11.9
20	26.7	25.8	24.9	24	23.1	22.1	21.1	20	18.9	17.6	16.3	14.9
25	33.3	32.3	31.2	30	28.9	27.6	26.4	25	23.6	22	20.4	18.6
32	42.7	41.3	39.9	38.5	37	35.4	33.7	32	30.2	28.2	26.1	23.9
40	53.3	51.6	49.9	48.1	46.2	44.2	42.2	40	37.7	35.3	32.7	29.8
50	66.7	64.5	62.4	60.1	57.7	55.3	52.7	50	47.1	44.1	40.8	37.3
63	84	81.3	78.6	75.7	72.7	69.6	66.4	63	59.4	55.6	51.4	47
80	106.4	103.2	100	96	92	88.8	84	80	75.2	70.4	65.6	60
100	133	129	125	120	115	111	105	100	94	88	82	75
125	166.3	161.3	156.3	150	143.8	138.8	131.3	125	117.5	110	102.5	93.8

Circuit Diagram

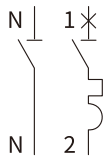
- EKM1-63S
- EKM1-63
- EKM1-63H
- EKM1-125H
- EKM2-63X
- EKM2-63
- EKM2-63H
- EKM1-125S
- EKM2-125H
- EKM3-63S
- EKM3-63
- EKM3-63H
- EKM3-125S
- EKM3-125H
- DZ47-63S
- EKM2-125



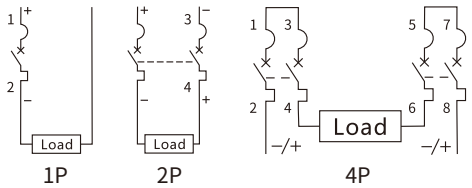
- EKM1-40N



- EKM2-40N



- EKM1-63DC
- EKM1-125DC



Products Overview of Circuit Breakers

Model No.	S1(Series No.1)					S3(Series No.3)	
	EKL2-40	EKL3-40M	EKL3-63	EKL5-63(H)	EKL5-63B	EKL13-63	EKL15-63(H)
Width(module)	1	2	2	3(2P),5(4P)	3(2P),5(4P)	2	3(2P),5(4P)
Breaking Capacity	6kA	6kA	6kA	6kA,10kA	10kA	6kA	6kA,10kA
Rated currents In	6-40A	6-40A	6-63A	6-63A	6-63A	6-63A	6-63A
Protection: Overcurrent and short circuit							
Standard	IEC61009-1	IEC61009-1	IEC61009-1	IEC61009-1	IEC61009-1 IEC62423	IEC61009-1	IEC61009-1
Number of poles	1P+N	1P+N	1P+N	1P+N, 3P+N	1P+N, 3P+N	1P+N	1P+N, 3P+N
Rated voltage(V)	230/240V~	230/240V~	230/240V~	1P+N:230/240V~ 3P+N:400/415V~	1P+N:230/240V~ 3P+N:400/415V~	230/240V~	1P+N:230/240V~ 3P+N:400/415V~
Tripping curve	B,C	B,C	B,C	B,C,D	B,C,D	B,C	B,C,D
Type	AC,A	AC,A	AC,A	AC,A,S	B	AC,A	AC,A,S
Certificate	CB CE UKCA	CB CE UKCA SAA	CB CE UKCA SAA	CB CE UKCA SAA	CB CE UKCA SAA	CB CE UKCA SAA	CB CE UKCA SAA
Catalogue page No.	26	27	28	29	30	69	70

Products Overview of Circuit Breakers

Model No.	S2(Series No.2)						
	EKL3-40S	EKL5-63S	EKL7-40	EKL17-40	EKL8-40M	EKL8-80	EKL9-40 EKL19-40
Width(module)	2	3(2P),5(4P)	1	1	2	2	1
Breaking Capacity	4.5kA	4.5kA	6kA	6kA	6kA	6kA	6kA
Rated currents In	6-40A	6-63A	6-40A	6-40A	6-40A	6-80A	6-40A
Protection: Overcurrent and short circuit							
Standard	IEC61009-1	IEC61009-1	IEC61009-1	IEC61009-1	IEC61009-1	IEC61009-1	IEC61009-1
Number of poles	1P+N	1P+N, 3P+N	1P+N	1P+N	1P+N	1P+N	1P+N
Rated voltage(V)	230/240V~	1P+N:230/240V~ 3P+N:400/415V~	230/240V~	230/240V~	230/240V~	230/240V~	230/240V~
Tripping curve	B,C	B,C,D	B,C	B,C	B,C	B,C	B,C
Type	AC,A	AC,A,S	AC,A	AC,A	AC,A	AC,A	AC,A
Certificate	CB CE	CB CE	CB CE UKCA	CB CE UKCA	CB CE UKCA	CB CE UKCA	CB CE UKCA SAA
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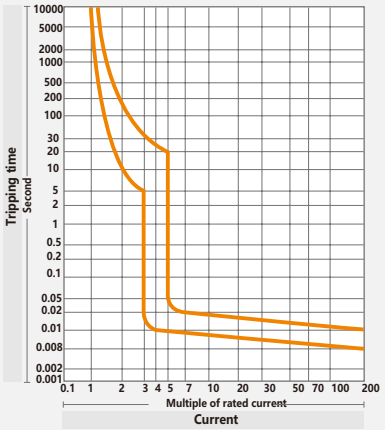
Tripping Characteristic

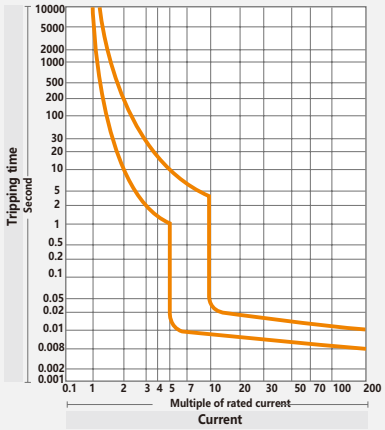
Curve	Rated current	Condition						
		Thermal release				Magnetic release		
		Non-tripping	Tripping	Non-tripping	Tripping time	Holding current	Tripping current	Tripping time
B	6-80A	1.13 × In		≤1h		3× In		≥0.1
			1.45 × In		<1h		5 × In	<0.1
C	6-80A	1.13 × In		≤1h		5× In		≥0.1
			1.45 × In		<1h		10 × In	<0.1
D	6-80A	1.13 × In		≤1h		10 × In		≥0.1
			1.45 × In		<1h		20 × In	<0.1

B curve



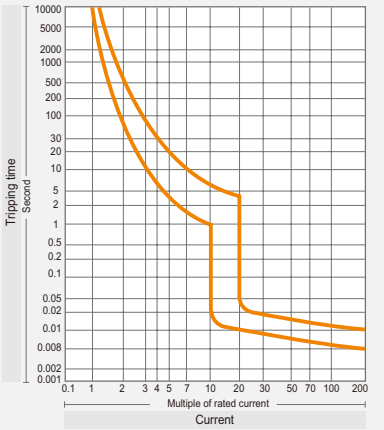
Universal use
- socket outlet, lighting device

C curve



Resistive & inductive loads with low inruch current
- lamp, high starting current motor

D curve



Loads with high inrush current
- transformer, solenoid valve, 2 pole motor

Temperature Derating Table

Rated current (A)	Correction factor for ambient temperature											
	-40℃	-30℃	-20℃	-10℃	0℃	10℃	20℃	30℃	40℃	50℃	60℃	70℃
6	8	7.7	7.5	7.2	6.9	6.6	6.3	6	5.7	5.3	4.9	4.5
10	13.3	12.9	12.5	12	11.5	11.1	10.5	10	9.4	8.8	8.2	7.5
16	21.3	20.7	20	19.2	18.5	17.7	16.9	16	15.1	14.1	13.1	11.9
20	26.7	25.8	24.9	24	23.1	22.1	21.1	20	18.9	17.6	16.3	14.9
25	33.3	32.3	31.2	30	28.9	27.6	26.4	25	23.6	22	20.4	18.6
32	42.7	41.3	39.9	38.5	37	35.4	33.7	32	30.2	28.2	26.1	23.9
40	53.3	51.6	49.9	48.1	46.2	44.2	42.2	40	37.7	35.3	32.7	29.8
50	66.7	64.5	62.4	60.1	57.7	55.3	52.7	50	47.1	44.1	40.8	37.3
63	84	81.3	78.6	75.7	72.7	69.6	66.4	63	59.4	55.6	51.4	47
80	106.4	103.2	100	96	92	88.8	84	80	75.2	70.4	65.6	60

Types

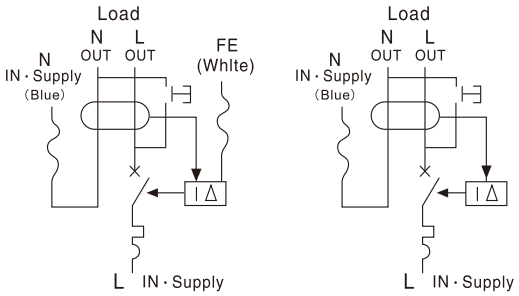
Both RCCBs and RCBOs are devided into types depending on the operating function:
Type AC ⏦: For which tripping is ensured for residual sinusoidal alternating currents, whether suddenly applied or slowly rising.
Type A ⏦ : For which tripping is ensued for residual sinusoidal alternating currents and residual pulsating direct currents, whether suddenly applied or slowly rising.

Tripping Sensitivity Data

RCD with a rated residual current of maximum 30mA are used for personnel,material and fire protection, as well as for protection against direct contact.
RCD with a rated residual current of maximum 300mA are used as preventative fire protection in case of insulation faults.
RCD with a rated residual current of 100mA co-ordinated with the earth system according to the formula I△n<50/R, to provide protection again indirect contacts.

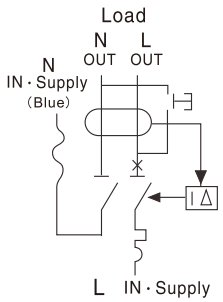
Circuit Diagram

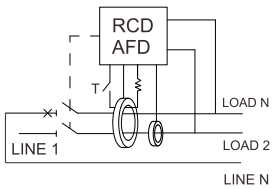
- EKL2-40



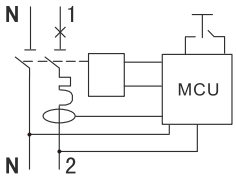
PE Fault Protection

- EKL7-40
- EKL17-40



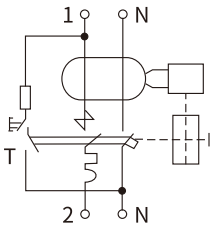


- EKL7-40AFD

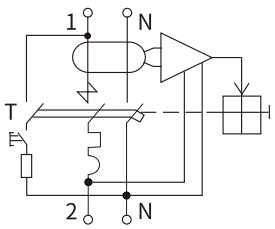


- EKL9-40AFD

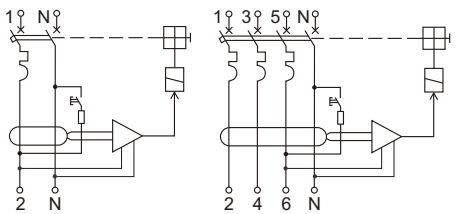
- EKL3-40M



- EKL3-63
- EKL13-63

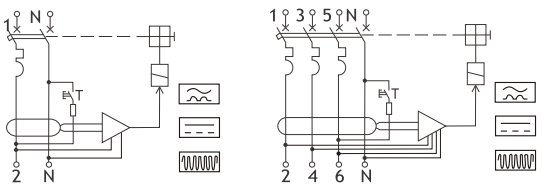


- EKL5-63
- EKL5-63S
- EKL15-63



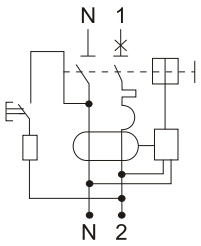
2P 4P

- EKL5-63B

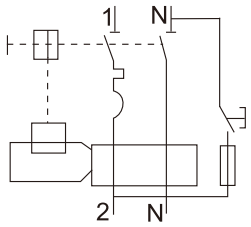


2P 4P

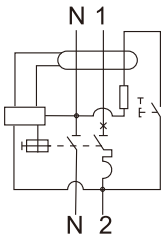
- EKL3-40S



- EKL8-40M
- EKL8-80



- EKL9-40
- EKL19-40



Products Overview of Circuit Breakers

Model No.	S1(Series No.1)		S2(Series No.2)					S3 (Series No.3)
	EKL1-63(H)	EKL1-63B(H)	EKL1-80(H)	EKL1-125(H)	EKL6-100(H)	EKL6-100B	EKL6-63EV	EKL11-63
Type of protection	AC,A,G,S	B	AC,A,G,S	AC,A,G,S	AC,A,G,S	B	EV	AC,A,G,S
Breaking Capacity	6kA,10kA	10kA	6kA,10kA	6kA	6kA,10kA	10kA	10kA	6kA,10kA
Rated currents In	16-63A	16-63A	16-80A	80-125A	16-100A	16-100A	16-63A	16-63A
Protection: Overcurrent and short circuit								
Standard	IEC61008-1	IEC61008-1 IEC62423	IEC61008-1	IEC61008-1	IEC61008-1	IEC61008-1 IEC62423	IEC61008-1 IEC62955	IEC61008-1
Number of poles	2P(1P+N) 4P(3P+N)	2P(1P+N) 4P(3P+N)	2P(1P+N) 4P(3P+N)	2P(1P+N) 4P(3P+N)	2P(1P+N) 4P(3P+N)	2P(1P+N) 4P(3P+N)	2P(1P+N) 4P(3P+N)	2P(1P+N) 4P(3P+N)
Insulation voltage Ui	500V	500V	500V	500V	500V	500V	500V	500V
Rated voltage(V)	1P+N:230/240V~ 3P+N:400/415V~	1P+N:230/240V~ 3P+N:400/415V~	1P+N:230/240V~ 3P+N:400/415V~	1P+N:230/240V~ 3P+N:400/415V~	1P+N:230/240V~ 3P+N:400/415V~	2P:230/240V~ 4P:400/415V~	1P+N:230/240V~ 3P+N:400/415V~	1P+N:230/240V~ 3P+N:400/415V~
Certificate	CB CE UKCA	CB CE VDE UKCA	CB CE BV	CB CE	CB CE UKCA	CB CE UKCA	CB CE UKCA SAA	CB CE UKCA SAA
Catalogue page No.	31	32	54	55	56	57	58	71

Life

In	Operating cycles		Operating frequency (operations/h)
	On-load operating cycles	Off-load operating cycles	
16,20,25,32	2000	2000	240
40,50,63,80,100,125	2000	1000	120

Breaking Time of Residual Current

Max.breaking time					
In(A)	I△n(A)	I△n	2I△n	5I△n	5A,10A,20A,50A,100A,200A,500A
16,20,25,32, 40,50,63,80,100,125	0.03,0.1,0.3	0.1s	0.08s	0.04s	0.04s

Wiring The suitable conductors should be used for connection,see table below for relative parameters.

Rated current In (A)	Cross section area s (mm^2)	Tightening torque (N.m)
16	2.5	2.5
20	2.5	2.5
25	4	2.5
32	6	2.5
40	10	2.5
50	10	2.5
63	16	2.5
80	25	2.5
100	35	2.5
125	50	2.5

Features

When designing residual current devices, manufacturing technology and type of routine tests, the IEC / EN 61008-1 standards were considered. Important features are:
Up to date design
User-friendly connection of conductors and busbars
Resistance to current surges; unwanted tripping excluded
Simple and solid fixing to a 35 mm mounting rail in compliance with EN 60715
Additional colour display of main contacts position (red:contacts closed, green:contacts open)

Against Electrocution

The use of exposed, substandard, badly wired, wrongly connected or damaged equipment as well as frayed or badly repaired cables reduces the safety of an installation and increases the risk of peron receiving an electric shock.
Electrocution is a passage of current through human body, which is dangerous. The flow of current through human body effects vital functions.
1. Breathing
2. Heartbeat
A correctly chosen RCCB can detect small currents flowing to earth and reduce the risk of electrocution. Effect of electric current through human body has been well researched and following chart summarizes the results.

Effect of electric current through human body has been well researched and following chart summarizes the results:

500mA		Immediate cardiac arrest resulting in death
70-100mA		Cardiac fibrillation; the heart begins to vibrate and no longer beats at a steady rate. This situation is dangerous since it is irreversible
20-30mA		Muscle contraction can cause respiratory paralysis
10mA		Muscle contraction: the person remains stuck to the conductor
1-10mA		Prickling sensations

However, electrocution should not be viewed in terms of current alone but in terms of contact voltage . A person gets electrocuted by coming in contact with an object that has a different potential from his/her own. The difference in potential causes the current to flow through the body.

The human body has known limits:
Under normal dry conditions, voltage limit=50V
in damp surroundings, voltage limit=25V

Against Indirect Contact

Over current protection devices like MCB are unable to act promptly on small earth leakage currents. To comply with wiring regulations the earth fault loop impedance in Ohms, multiplied by the rate tripping current of the RCD in amperes must not exceed 50.

Example

For an RCD with a rated tripping current of 30mA, the maximum permissible earth fault loop impedance is calculated as follows: Zs(max)=50/In=50/0.03=1.666

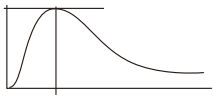
Rated tripping current of the RCD	Maximum permissible earth fault loop impedance in
10mA	5,000
30mA	1,666
100mA	500
300mA	166

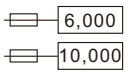
Against Fire

The majority of fires which occur as result of faulty wiring are started by current flowing to earth. Fire can be started by fault current of less than lamp.
The normal domestic overload protective device such as a fuse or MCB will not detect such a small current. A correctly chosen RCD will detect this fault current and interrupt the supply, hence reducing the risk of a fire starting.

ETEK RCCB Main Technical Parameters

Rated current I_n	Rated Voltage U_n	Rated fault frequency f_n
Maximum permissible current value determined by heat, breaking capacity and terminals an RCCB can carry. Preferred values: 16, 25, 40, 63, 80, 100,125A.	The rated operational voltage of an RCCB is the voltage value, determined by breaking capacity, clearance and creepage distance and test circuit. Preferred values:230/400V.	The frequency which the breaking characteristics of an RCCB are designed. Preferred values: 50/60Hz

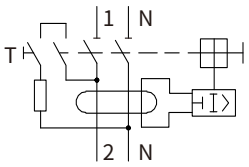
Alternative Current Sensitive	Pulsating direct current sensitive	Surge current proof
		
They react to AC current which, whether suddenly applied or slowly arising.	They react to AC and pulsating DC fault current which reach 0 or almost 0 within one time period of the mains frequency.	RCCB's surge capacity. Not tripping at standardized 8/20 s surge-current waves acc.to VDE 0432 Part 2 with surge current values of up to 250A.

Rated fault current I n	Numbers of poles	Breaking capacity	Temperature resistance
Value of a residual fault current at which the RCCB shall trip. Preferred values:10, 30,100, 300mA	Number of current paths which the RCCB can monitor. Preferred values: 2 and 4.	 The function of an RCCB is not impaired by short-circuit current of up to 6,000 Aresp. 10,000A provided a back-up fuse is used.	Suitable for temperatures from -25℃ up to 40℃.

Surge capacity	Short time delay selective
KV RCCB's surge capacity. Not tripping at standardized 8/20 us surge-current waves acc.to VDE 0432 Part 2 with surge current values of up to 250A.	**S** Time Delay Type

Circuit Diagram

- EKL1-63(H)
- EKL1-80(H)
- EKL1-125(H)



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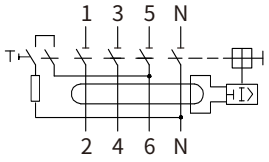
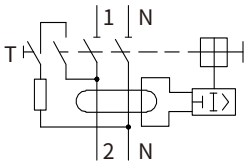


4P

- EKL11-63(H)



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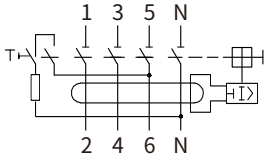
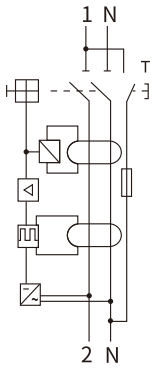


4P

- EKL1-63B(H)



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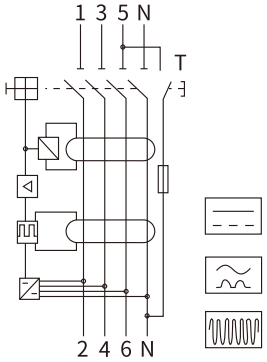
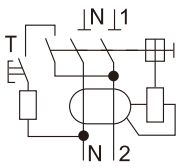


4P

- EKL6-100(H)



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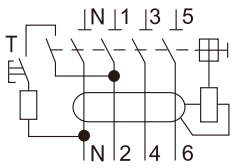
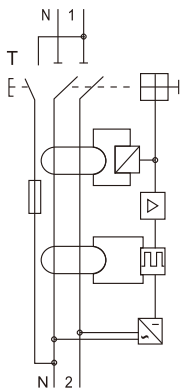


4P

- EKL6-100B



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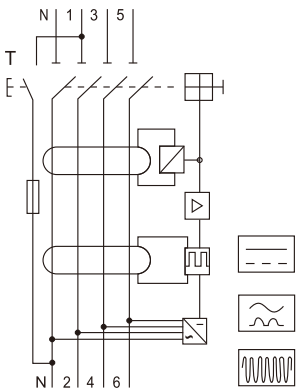
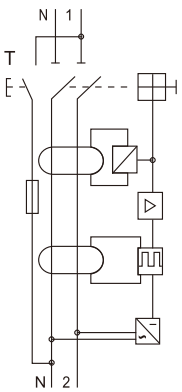


4P

- EKL6-63EV



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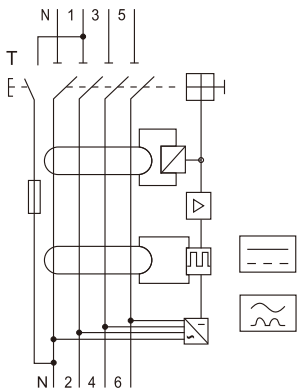


4P

Products Overview of Circuit Breakers

Model No.	S1(Series No.1)	S2(Series No.2)	S3(Series No.3)
	EKD1-125	EKD2-125	EKD3-125
Rated currents In	16-125A	16-125A	16-125A
Photo			
Standard	IEC60947-3	IEC60947-3	IEC60947-3
Number of poles	1P,2P,3P,4P	1P,2P,3P,4P	1P,2P,3P,4P
Insulation voltage Ui	690V	690V	690V
Rated voltage(V)	240/415V~	240/415V~	240/415V~
Type	AC	AC	AC
Certificate	CB CE UKCA	CB CE UKCA	CB CE UKCA
Catalogue page No.	33	59	72

Endurance(operations)

Category	Operations	Operation frequency	Rated current
Electric endurance	1500	120/h	16~100A
Mechanical endurance	10000	120/h	16~100A

Wiring The suitable conductors should be used for connection,see table below for relative parameters.

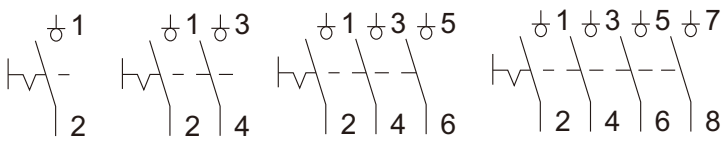
Rated current In (A)	Cross section area s (mm^2)	Tightening torque (N.m)
16	2.5	3.5
20	2.5	3.5
25	4	3.5
32	6	3.5
40	10	3.5
50	10	3.5
63	16	3.5
80	35	3.5
100	35	3.5
125	35	3.5

Features

1. Current capacity is enhanced and electric drive compensation is fully applied
2. Reliable operation thanks to special designed operating mechanism
3. Safe operation is ensured

Circuit Diagram

- EKD1-125
- EKD2-125
- EKD3-125



Modular S1 Series

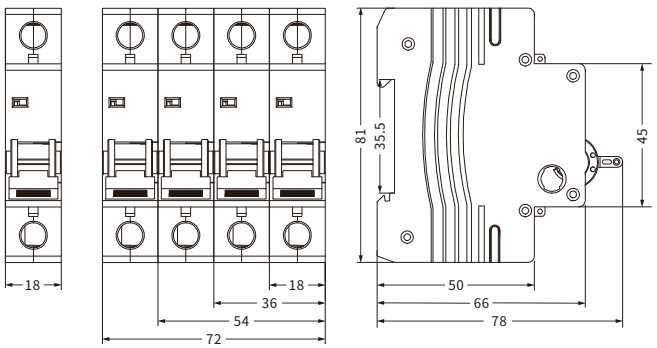
MCB EKM1-63S 4.5kA

Mini Circuit Breaker ---------- Standard_ IEC60898-1

Technical Data

Standard	IEC/EN60898-1
Protection	Overcurrent and short circuit
Type of trip	Thermo-magnetic
No.of poles	1P,1P+N,2P,3P,3P+N,4P
Rated currents (In)	1,2,3,4,5,6,10,16,20,25,32,40,50,63A
Rated voltage (Ue)	240/415V~
Rated frequency	50/60Hz
Rated breaking capacity	4,500A
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In, D:(10-20) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-5°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	25mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

Overall and Installation Dimension(mm)



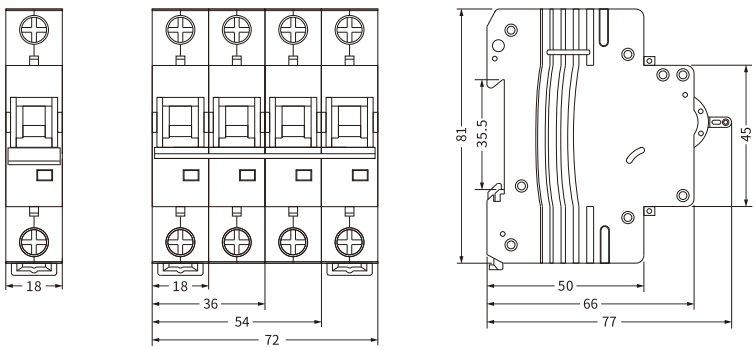
MCB EKM1-63 6kA

Mini Circuit Breaker ---------- Standard_ IEC60898-1

Technical Data

Standard	IEC/EN60898-1
Protection	Overcurrent and short circuit
Type of trip	Thermo-magnetic
No.of poles	1P,1P+N,2P,3P,3P+N,4P
Rated currents (In)	1,2,3,4,5,6,10,16,20,25,32,40,50,63A
Rated voltage (Ue)	240/415V~
Rated frequency	50/60Hz
Rated breaking capacity	6,000A
Energy Limiting Class	3
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In, D:(10-20) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-5°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	25mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

Overall and Installation Dimension(mm)



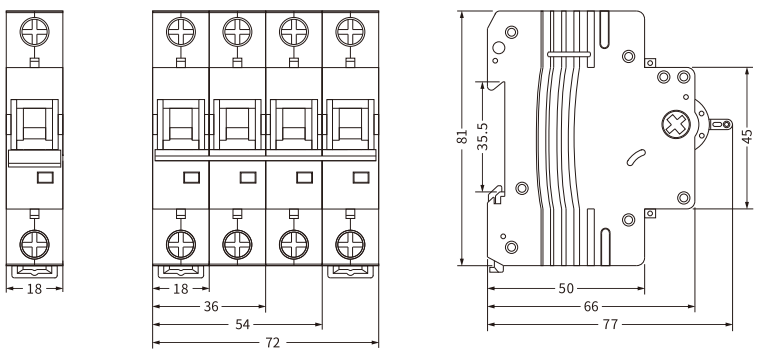
MCB EKM1-63H 10kA

Mini Circuit Breaker ---------- Standard_ IEC60898-1

Technical Data

Standard	IEC/EN60898-1
Protection	Overcurrent and short circuit
Type of trip	Thermo-magnetic
No.of poles	1P,1P+N,2P,3P,3P+N,4P
Rated currents (In)	1,2,3,4,5,6,10,16,20,25,32,40,50,63A
Rated voltage (Ue)	240/415V~
Rated frequency	50/60Hz
Rated breaking capacity	10,000A
Energy Limiting Class	3
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In, D:(10-20) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-5°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	25mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

Overall and Installation Dimension(mm)



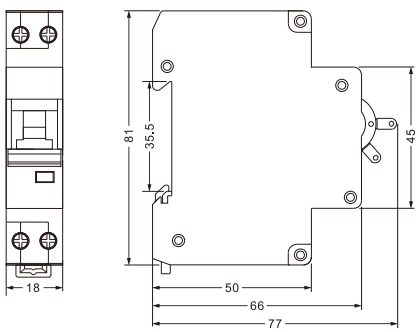
MCB EKM1-40N 6kA

Mini Circuit Breaker ---------- Standard_ IEC60898-1

Technical Data

Standard	IEC/EN60898-1
Protection	Overcurrent and short circuit
Type of trip	Thermo-magnetic
No.of poles	1P+N
Rated currents (In)	6,10,16,20,25,32,40A
Rated voltage (Ue)	230/240V~
Rated frequency	50/60Hz
Rated breaking capacity	6,000A
Energy Limiting Class	3
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-5°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	16mm^2
Max. tightening torque	1.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

Overall and Installation Dimension(mm)



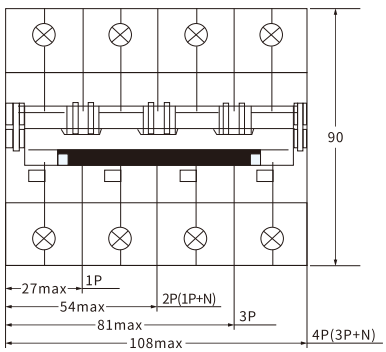
MCB EKM1-125H 15kA

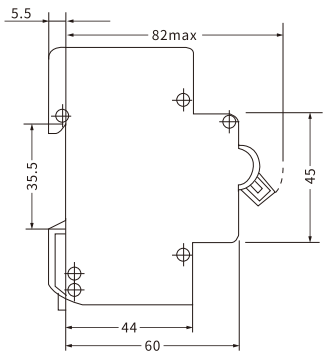
Mini Circuit Breaker ---------- Standard_ IEC60898-1
IEC60947-2

Technical Data

Standard	IEC/EN60898-1	IEC/EN60947-2
Protection	Overcurrent and short circuit	
Type of trip	Thermo-magnetic	
No.of poles	1P,1P+N,2P,3P,3P+N,4P	
Rated currents (In)	63,80,100,125A	
Rated voltage (Ue)	240/415V~	
Rated frequency	50/60Hz	
Rated breaking capacity	10,000A	15,000A
Rated impulse withstand voltage (1.2/50) Uimp	4,000V	
Dielectric test voltage at Ind. Freq.for 1 min	2kV	
Thermal release characteristic	(1.13-1.45) x In	(1.05-1.30) x In
Thermo-magnetic release characteristic	C:(5-10) x In, D:(10-20) x In	(8-12) x In
Electrical life	4,000 Cycles	
Mechanical life	10,000 Cycles	
Contact position indicator	Yes	
Protection degree	IP20	
Ambient temperature	-5°C to +40°C, Max.95% humidity	
Terminal connection type	Cable/Pin-type busbar	
Max. terminal size for cable	50mm^2	
Max. tightening torque	3.5N.m	
Installation	Mounting on 35mm DIN rail	
Connection	From top and bottom	

Overall and Installation Dimension(mm)





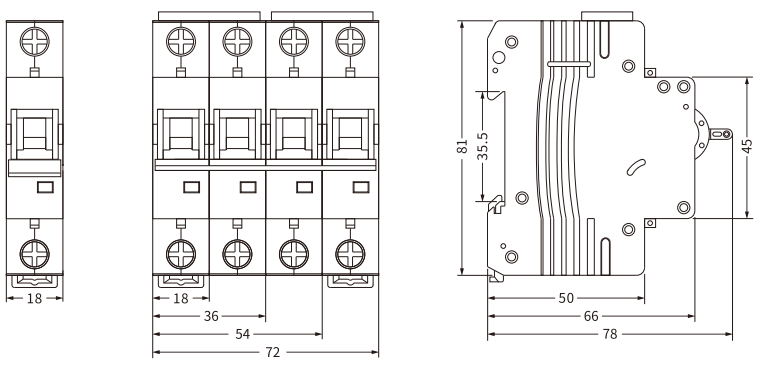
DC MCB EKM1-63DC

Mini Circuit Breaker ---------- Standard_ IEC60947-2

Technical Data

Standard	IEC/EN60947-2
Protection	Overcurrent and short circuit
Type of trip	Thermo-magnetic
No.of poles	1P,2P,4P
Rated currents (In)	1,2,3,4,5,6,10,16,20,25,32,40,50,63A
Rated voltage (Ue)	1P(250VDC),2P(500VDC),4P(1000VDC)
Rated breaking capacity	6,000A
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	3kV
Thermal release characteristic	(1.05-1.30) x In
Magnetic release characteristic	(8-12) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-5°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar/Fork-type busbar
Max. terminal size for cable	25mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	According to the wiring diagram

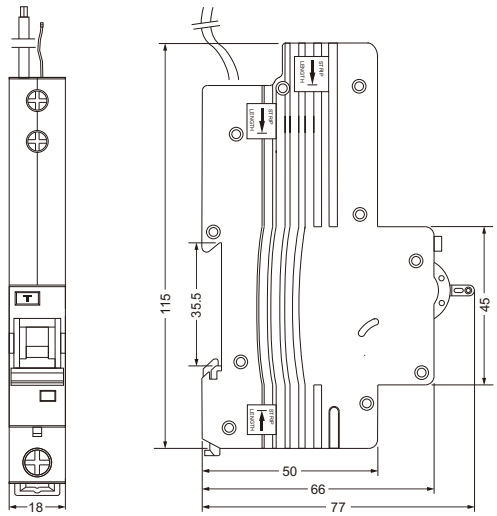
Overall and Installation Dimension(mm)



RCBO EKL2-40

RCCB with Overcurrent Protection ---------- Standard_ IEC61009-1

Overall and Installation Dimension(mm)



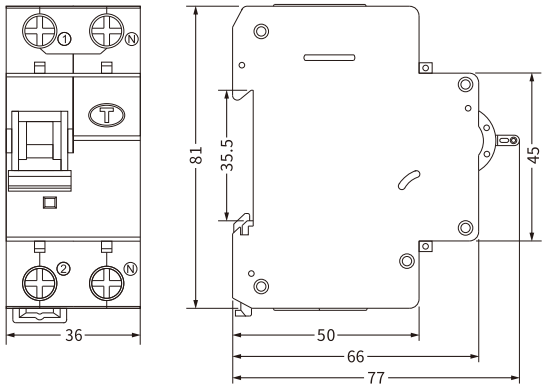
Technical Data

Standard	IEC/EN61009-1
Protection	Ground fault, Overcurrent and short circuit, Over-voltage(selectable)
Type of trip	Ground fault : Electronic Overload and short circuit :Thermo-magnetic
Type of protection (electric leakage)	AC,A
No.of poles	1P+N 1module , N line non-disconnected
Rated currents (In)	6,10,16,20,25,32,40A
Rated sensitivity currents I△n	10,30,100,300mA
Residual current off-time under I△n	⩽ 0.1s
Rated residual making and breaking capacity(I△m)	500A(In⩽50A)
Rated voltage (Ue)	230/240V~
Rated frequency	50/60Hz
Rated breaking capacity	6,000A
Energy Limiting Class	3
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-25°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	L(in):25mm^2 , N/L(out) :16mm^2
Max. tightening torque	L(in):2.5N.m , N/L(out):2N.m
Installation	Mounting on 35mm DIN rail
Connection	From bottom

RCBO EKL3-40M

RCCB with Overcurrent Protection ---------- Standard_ IEC61009-1

Overall and Installation Dimension(mm)



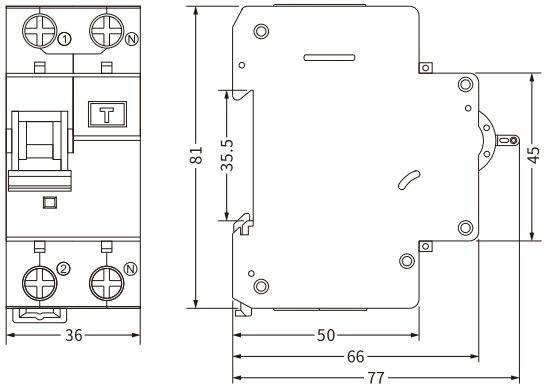
Technical Data

Standard	IEC/EN61009-1
Protection	Ground fault, Overcurrent and short circuit
Type of trip	Ground fault : Electro-magnetic Overload and short circuit :Thermo-magnetic
Type of protection (electric leakage)	AC,A
No.of poles	1P+N 2module , N line with disconnected
Rated currents (In)	6,10,16,20,25,32,40A
Rated sensitivity currents I△n	30,100,300mA
Residual current off-time under I△n	⩽ 0.1s
Rated residual making and breaking capacity(I△m)	500A(In⩽50A)
Rated voltage (Ue)	230/240V~
Rated frequency	50/60Hz
Rated breaking capacity	6,000A
Energy Limiting Class	3
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Ground fault indicator	Yes
Protection degree	IP20
Ambient temperature	-25°C to +55°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar/Fork-type busbar
Max. terminal size for cable	25mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

RCBO EKL3-63

RCCB with Overcurrent Protection ---------- Standard_ IEC61009-1

Overall and Installation Dimension(mm)



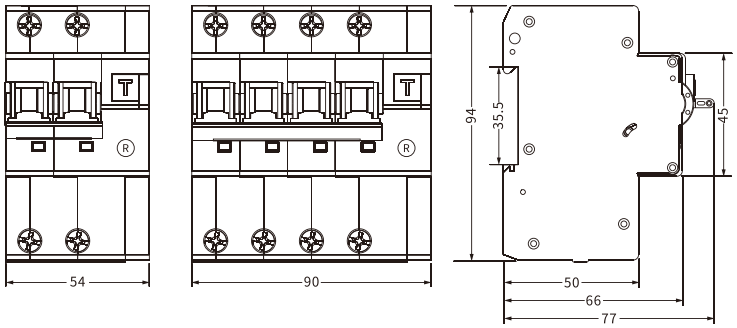
Technical Data

Standard	IEC/EN61009-1
Protection	Ground fault, Overcurrent and short circuit, Over-voltage(selectable)
Type of trip	Ground fault : Electronic Overload and short circuit :Thermo-magnetic
Type of protection (electric leakage)	AC,A
No.of poles	1P+N 2module , N line with disconnected
Rated currents (In)	6,10,16,20,25,32,40,50,63A
Rated sensitivity currents I△n	10,30,100,300mA
Residual current off-time under I△n	⩽ 0.1s
Rated residual making and breaking capacity(I△m)	500A(In⩽50A), 10In(In>50A)
Rated voltage (Ue)	230/240V~
Rated frequency	50/60Hz
Rated breaking capacity	6,000A
Energy Limiting Class	3
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Ground fault indicator	Yes
Protection degree	IP20
Ambient temperature	-25°C to +55°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar/Fork-type busbar
Max. terminal size for cable	25mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

RCBO EKL5-63(H)

RCCB with Overcurrent Protection ---------- Standard_ IEC61009-1

Overall and Installation Dimension(mm)



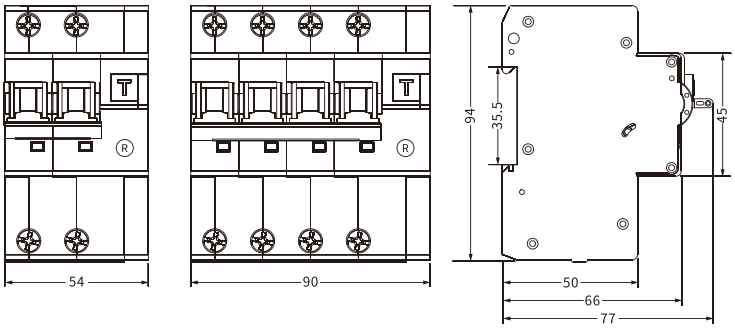
Technical Data

Standard	IEC/EN61009-1
Protection	Ground fault, Overcurrent and short circuit, Over-voltage(selectable)
Type of trip	Ground fault : Electronic Overload and short circuit :Thermo-magnetic
Type of protection (electric leakage)	AC,A,S
No.of poles	1P+N 3module , 3P+N 5module, N line with disconnected
Rated currents (In)	6,10,16,20,25,32,40,50,63A
Rated sensitivity currents I△n	10,30,100,300mA
Residual current off-time under I△n	⩽ 0.1s
Rated residual making and breaking capacity(I△m)	500A(In⩽50A), 10In(In>50A)
Rated voltage (Ue)	1P+N:230/240V~,3P+N:400/415V~
Rated frequency	50/60Hz
Rated breaking capacity	6,000A, 10,000A
Energy Limiting Class	3
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In, D:(10-20) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Ground fault indicator	Yes
Protection degree	IP20
Ambient temperature	-25°C to +55°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	25mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top

RCBO Type B EKL5-63B

RCCB with Overcurrent Protection ---------- Standard_ IEC61009-1
IEC62423

Overall and Installation Dimension(mm)



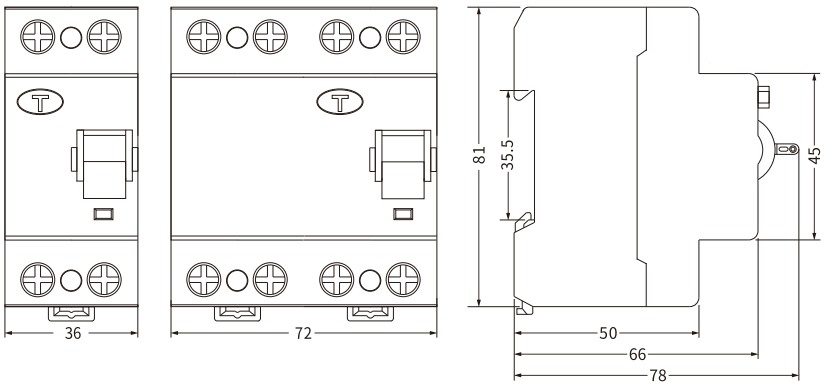
Technical Data

Standard	IEC/EN61009-1 ,IEC/EN62423
Protection	Ground fault, Overcurrent and short circuit, Over-voltage(selectable)
Type of trip	Ground fault : Electronic Overload and short circuit :Thermo-magnetic
Type of protection (electric leakage)	B
No.of poles	1P+N 3module , 3P+N 5module, N line with disconnected
Rated currents (In)	6,10,16,20,25,32,40,50,63A
Rated sensitivity currents I△n	30,100,300mA
Residual current off-time under I△n	⩽ 0.1s
Rated residual making and breaking capacity(I△m)	500A(In⩽50A), 10In(In>50A)
Rated voltage (Ue)	1P+N:230/240V~,3P+N:400/415V~
Rated frequency	50/60Hz
Rated breaking capacity	6,000A, 10,000A
Energy Limiting Class	3
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In, D:(10-20) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Ground fault indicator	Yes
Protection degree	IP20
Ambient temperature	-25°C to +55°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	25mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top

RCCB EKL1-63(H)

Residual Current Circuit Breaker ---------- Standard_ IEC61008-1

Overall and Installation Dimension(mm)



Technical Data

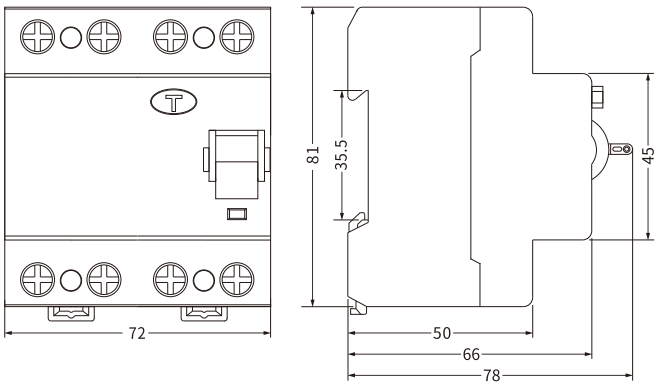
Standard	IEC/EN61008-1
Protection	Ground fault
Type of trip	Electro-magnetic
Type of protection (electric leakage)	AC,A,G,S
No.of poles	2P(1P+N), 4P(3P+N) , N Pole on right
Rated currents (In)	16,25,32,40,63A
Rated sensitivity currents I△n	10,30,100,300mA (10mA only for In=16-25A)
Residual current off-time under I△n	⩽ 0.1s
Rated residual making and breaking capacity(I△m)	500A(In⩽50A), 10In(In>50A)
Rated voltage (Ue)	1P+N: 230/240V~, 3P+N:400/415V~
Rated frequency	50/60Hz
Rated breaking capacity	6,000A, 10,000A
SCPD fuse	6000 10000
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Electrical life	2,000 Cycles
Mechanical life	4,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-25°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar/Fork-type busbar
Max. terminal size for cable	25mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

RCCB Type B EKL1-63B 10kA

Residual Current Circuit Breaker

Standard_ IEC61008-1
IEC62423

Overall and Installation Dimension(mm)



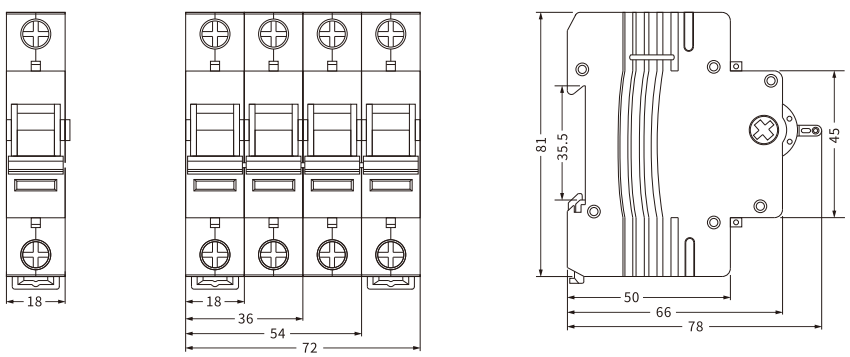
Technical Data

Standard	IEC/EN61008-1, IEC62423
Protection	Ground fault
Type of trip	Electro-magnetic
Type of protection (electric leakage)	B
No.of poles	2P(1P+N), 4P(3P+N)
Rated currents (In)	25,40,63A
Rated sensitivity currents I△n	30,100,300mA
Residual current off-time under I△n	⩽ 0.1s
Rated residual making and breaking capacity(I△m)	500A(In⩽50A), 10In(In>50A)
Rated voltage (Ue)	1P+N: 230/240V~, 3P+N:400/415V~
Rated frequency	50/60Hz
Rated breaking capacity	10,000A
SCPD fuse	10000
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2.5kV
Electrical life	2,000 Cycles
Mechanical life	4,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-25°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar/U-type busbar
Max. terminal size for cable	25mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

Technical Data

Standard	IEC/EN60947-3
No.of poles	1P,2P,3P,4P
Rated currents (In)	16,20,32,40,50,63,80,100,125A
Rated voltage (Ue)	240/415V~
Rated frequency	50/60Hz
Utilization category	AC-22A
Short-time withstand current Icw	12Ie, t=1s
Rated short-circuit making capacity Icm	20Ie, t=0.1s
Rated making & breaking capacity	3Ie, 1.05Ue, CosΦ=0.65
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Rated insulation voltage Ui	690V
Electrical life	2,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-5°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	50mm^2
Max. tightening torque	3.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

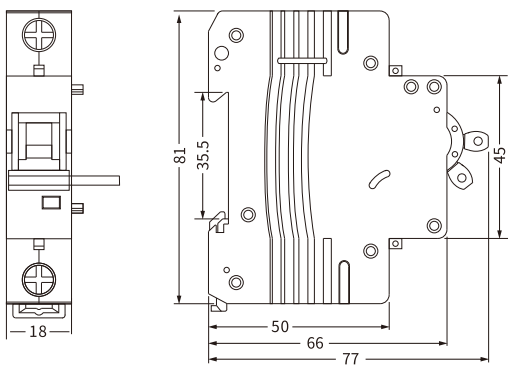
Overall and Installation Dimension(mm)



Technical Data

Standard	IEC60947-5-1
Rated voltage US(V)	AC230/400 50/60Hz DC24 DC48 AC24 50/60Hz
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Rated short circuit making capacity	20Ie, t=0.1s
Dielectric test voltage at ind. Freq. for 1min	2kV
Insulation voltage Ui	500V
Pollution degree	2
Rated voltage (Ue)	AC230V
Rated insulating voltage(Ui)	500V
Over-voltage tripping range	280V±5%
Under-voltage tripping range	170V±5%
Electrical life	4,000 Cycles
Mechanical life	4,000 Cycles
Protection degree	IP20
Ambient temperature (with daily average≤35°C)	-5°C~+40°C
Storage temperature	-25°C~+70°C
Terminal connection type	Cable
Terminal size top/bottom for cable	2.5mm^2 18-13AWG
Tightening torque	0.8 N.m 7In-lbs

Overall and Installation Dimension(mm)



EKM1-OF

Auxiliary Contact for EKM1,EKL3, EKM3,EKL13

EKM1-FB

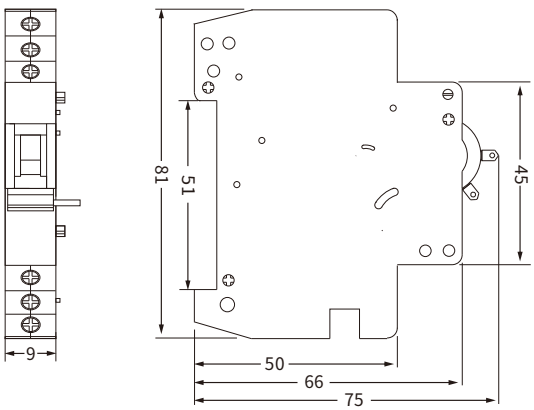
Alarm Auxiliary Contact for EKM1,EKL3 EKM3,EKL13

Standard_ IEC60947-5-1

Technical Data

Rated value	AC415/400V 50/60Hz 3A
	AC240/400V 50/60Hz 3A
	DC130V 1A
	DC48V 2A
	DC24V 6A
Configurations	EKM1-OF 1N/O+1N/C
	EKM1-FB 2N/O+2N/C
Rated impulse withstand voltage (1.2/50)Uimp	4,000V
Rated short circuit making capacity	20Ie, t=0.1s
Dielectric test voltage at ind. Freq. for 1min	2kV
Insulation voltage Ui	500V
Pollution degree	2
Electrical life	6,000 Cycles
Mechanical life	10,000 Cycles
Protection degree	IP20
Ambient temperature (with daily average≤35°C)	-5°C~+40°C
Storage temperature	-25°C~+70°C
Terminal connection type	Cable
Terminal size top/bottom for cable	2.5mm^2 18-13AWG
Tightening torque	0.8 N.m 7In-lbs

Overall and Installation Dimension(mm)



Modular S2 Series

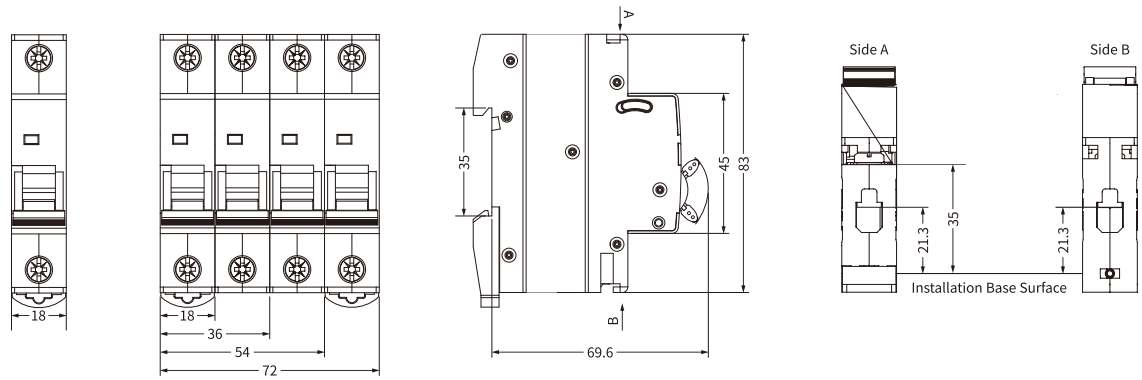
MCB EKM2-63X 4.5kA

Mini Circuit Breaker ---------- Standard_ IEC60898-1

Technical Data

Standard	IEC/EN60898-1
Protection	Overcurrent and short circuit
Type of trip	Thermo-magnetic
No.of poles	1P,1P+N,2P,3P,3P+N,4P
Rated currents (In)	1,2,3,4,5,6,10,16,20,25,32,40,50,63A
Rated voltage (Ue)	240/415V~
Rated frequency	50/60Hz
Rated breaking capacity	4,500A
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In, D:(10-20) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-5°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	25mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

Overall and Installation Dimension(mm)



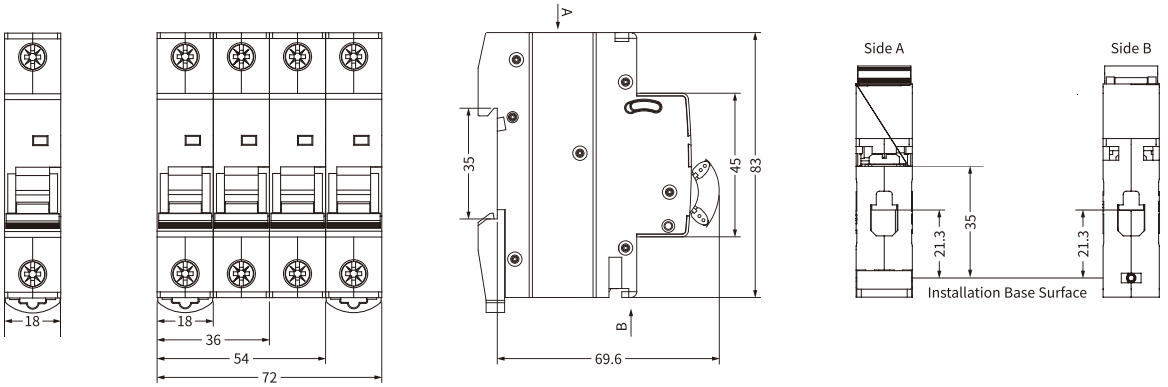
MCB EKM2-63 6kA

Mini Circuit Breaker ---------- Standard_ IEC60898-1

Technical Data

Standard	IEC/EN60898-1
Protection	Overcurrent and short circuit
Type of trip	Thermo-magnetic
No.of poles	1P,1P+N,2P,3P,3P+N,4P
Rated currents (In)	1,2,3,4,5,6,10,16,20,25,32,40,50,63A
Rated voltage (Ue)	240/415V~
Rated frequency	50/60Hz
Rated breaking capacity	6,000A
Energy Limiting Class	3
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In, D:(10-20) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-5°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	25mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

Overall and Installation Dimension(mm)



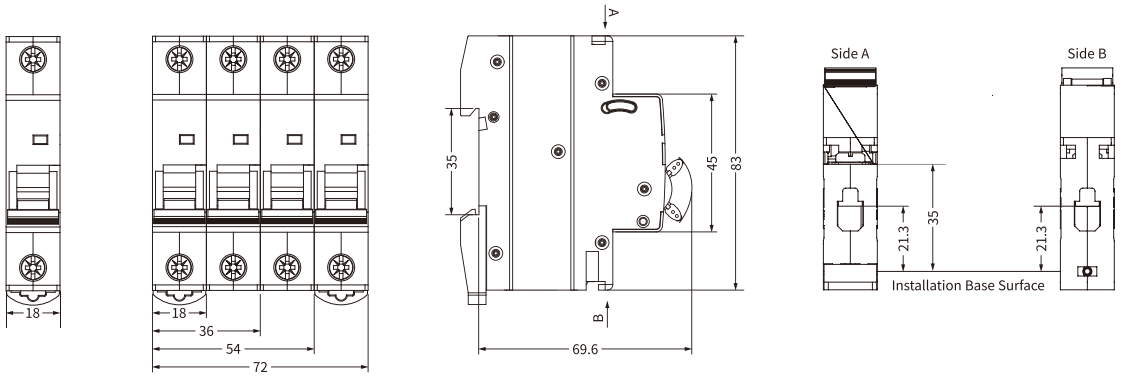
MCB EKM2-63H 10kA

Mini Circuit Breaker ---------- Standard_ IEC60898-1

Technical Data

Standard	IEC/EN60898-1
Protection	Overcurrent and short circuit
Type of trip	Thermo-magnetic
No.of poles	1P,1P+N,2P,3P,3P+N,4P
Rated currents (In)	1,2,3,4,5,6,10,16,20,25,32,40,50,63A
Rated voltage (Ue)	240/415V~
Rated frequency	50/60Hz
Rated breaking capacity	10,000A
Energy Limiting Class	3
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In, D:(10-20) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-5°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	25mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

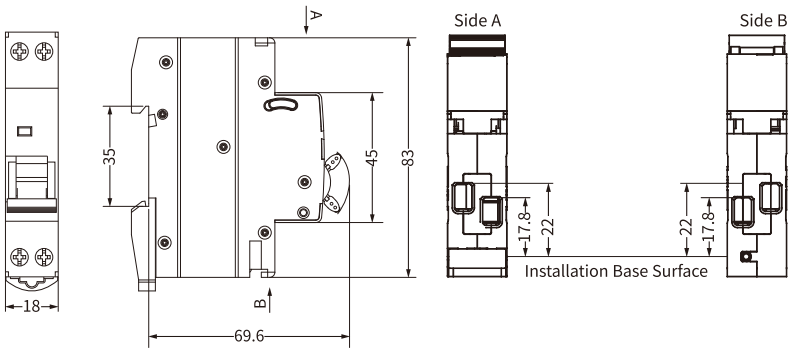
Overall and Installation Dimension(mm)



Technical Data

Standard	IEC/EN60898-1
Protection	Overcurrent and short circuit
Type of trip	Thermo-magnetic
No.of poles	1P+N
Rated currents (In)	6,10,16,20,25,32,40A
Rated voltage (Ue)	230/240V~
Rated frequency	50/60Hz
Rated breaking capacity	6,000A
Energy Limiting Class	3
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In, D:(10-20) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-5°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	$16mm^2$
Max. tightening torque	1.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

Overall and Installation Dimension(mm)



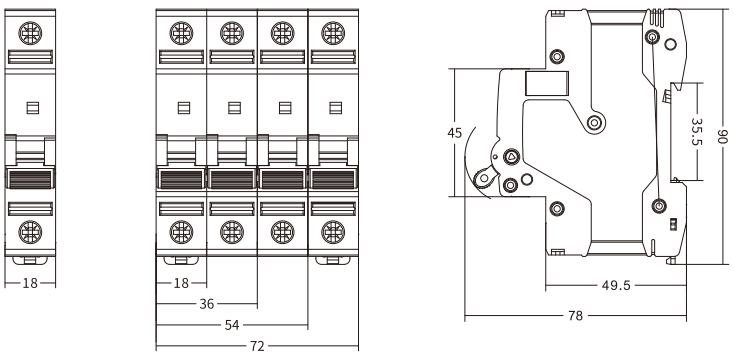
MCB EKM1-125S 6kA

Mini Circuit Breaker ---------- Standard_ IEC60898-1

Technical Data

Standard	IEC/EN60898-1
Protection	Overcurrent and short circuit
Type of trip	Thermo-magnetic
No.of poles	1P,1P+N,2P,3P,3P+N,4P
Rated currents (In)	63,80,100,125A
Rated voltage (Ue)	240/415V~
Rated frequency	50/60Hz
Rated breaking capacity	6,000A
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Thermo-magnetic release characteristic	C:(5-10) x In, D:(10-20) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-5°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	50mm^2
Max. tightening torque	3.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

Overall and Installation Dimension(mm)



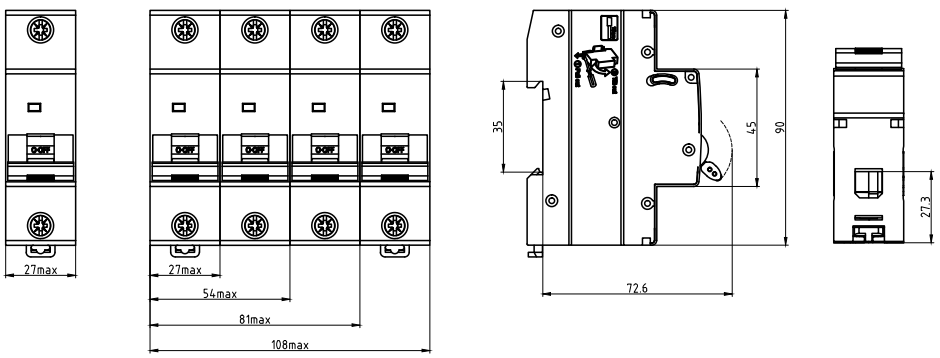
MCB EKM2-125H 10kA

Mini Circuit Breaker ---------- Standard_ IEC60898-1
IEC60947-2

Technical Data

Standard	IEC/EN60898-1	IEC/EN60947-2
Protection	Overcurrent and short circuit	
Type of trip	Thermo-magnetic	
No.of poles	1P,1P+N,2P,3P,3P+N,4P	
Rated currents (In)	63,80,100,125A	
Rated voltage (Ue)	240/415V~	
Rated frequency	50/60Hz	
Rated breaking capacity	6,000A	10,000A
Rated impulse withstand voltage (1.2/50) Uimp	4,000V	
Dielectric test voltage at Ind. Freq.for 1 min	2kV	
Thermal release characteristic	(1.13-1.45) x In	(1. 05-1.30) x In
Thermo-magnetic release characteristic	C:(5-10) x In, D:(10-20) x In	(8-12) x In
Electrical life	4,000 Cycles	
Mechanical life	10,000 Cycles	
Contact position indicator	Yes	
Protection degree	IP20	
Ambient temperature	-5°C to +40°C, Max.95% humidity	
Terminal connection type	Cable/Pin-type busbar	
Max. terminal size for cable	50mm^2	
Max. tightening torque	3.5N.m	
Installation	Mounting on 35mm DIN rail	
Connection	From top and bottom	

Overall and Installation Dimension(mm)



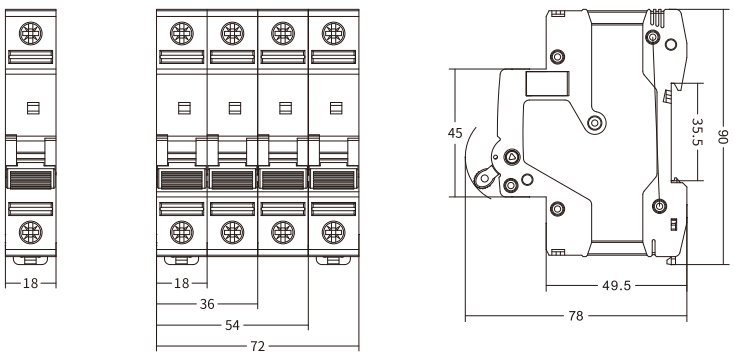
DC MCB EKM1-125DC 10kA

Mini Circuit Breaker ---------- Standard_ IEC60947-2

Technical Data

Standard	IEC/EN60947-2
Protection	Overcurrent and short circuit
Type of trip	Thermo-magnetic
No.of poles	1P,2P,4P
Rated currents (In)	80,100,125A
Rated voltage (Ue)	1P(250VDC),2P(500VDC),4P(1000VDC)
Rated breaking capacity	10,000A
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	3kV
Thermal release characteristic	(1.05-1.30) x In
Magnetic release characteristic	(8-12) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-5°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar/Fork-type busbar
Max. terminal size for cable	35mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	According to the wiring diagram

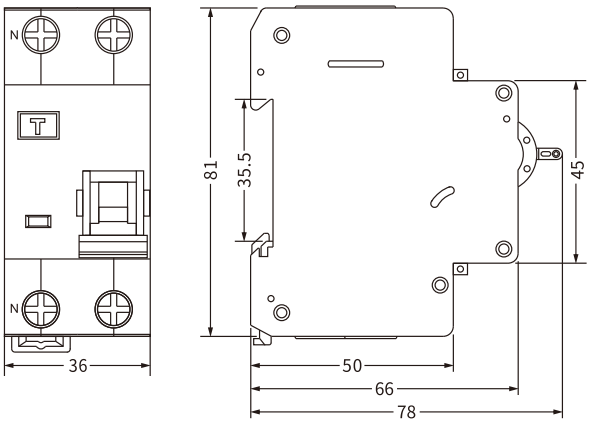
Overall and Installation Dimension(mm)



RCBO EKL3-40S 4.5kA

RCCB with Overcurrent Protection ---------- Standard_ IEC61009-1

Overall and Installation Dimension(mm)



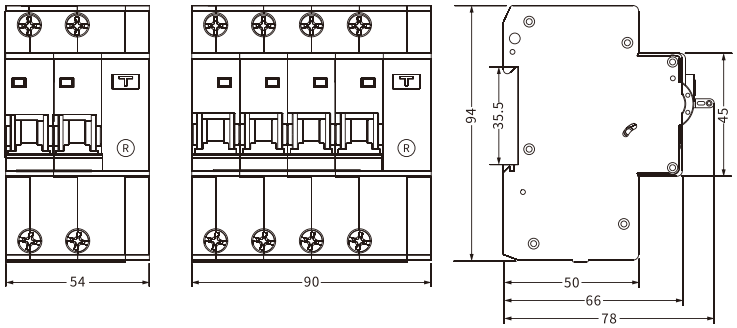
Technical Data

Standard	IEC/EN61009-1
Protection	Ground fault, Overcurrent and short circuit, Over-voltage(selectable)
Type of trip	Ground fault : Electronic Overload and short circuit :Thermo-magnetic
Type of protection (electric leakage)	AC,A
No.of poles	1P+N 2module , N line with disconnected
Rated currents (In)	6,10,16,20,25,32,40A
Rated sensitivity currents I△n	10,30,100,300mA
Residual current off-time under I△n	⩽ 0.1s
Rated residual making and breaking capacity(I△m)	500A(In⩽50A)
Rated voltage (Ue)	230/240V~
Rated frequency	50/60Hz
Rated breaking capacity	4,500A
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-25°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	25mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top

RCBO EKL5-63S 4.5kA

RCCB with Overcurrent Protection ---------- Standard_ IEC61009-1

Overall and Installation Dimension(mm)



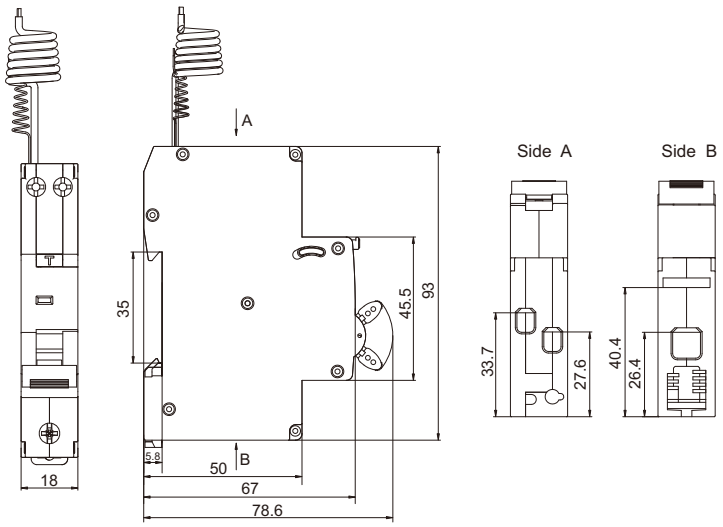
Technical Data

Standard	IEC/EN61009-1
Protection	Ground fault, Overcurrent and short circuit, Over-voltage(selectable)
Type of trip	Ground fault : Electronic Overload and short circuit :Thermo-magnetic
Type of protection (electric leakage)	AC,A,S
No.of poles	1P+N 3module , 3P+N 5module, N line with disconnected
Rated currents (In)	6,10,16,20,25,32,40,50,63A
Rated sensitivity currents I△n	10,30,100,300mA
Residual current off-time under I△n	⩽ 0.1s
Rated residual making and breaking capacity(I△m)	500A(In⩽50A), 10In(In>50A)
Rated voltage (Ue)	1P+N:230/240V~,3P+N:400/415V~
Rated frequency	50/60Hz
Rated breaking capacity	4,500A
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In, D:(10-20) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Ground fault indicator	Yes
Protection degree	IP20
Ambient temperature	-25°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	25mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top

RCBO EKL7-40 6kA

RCCB with Overcurrent Protection ---------- Standard_ IEC61009-1

Overall and Installation Dimension(mm)



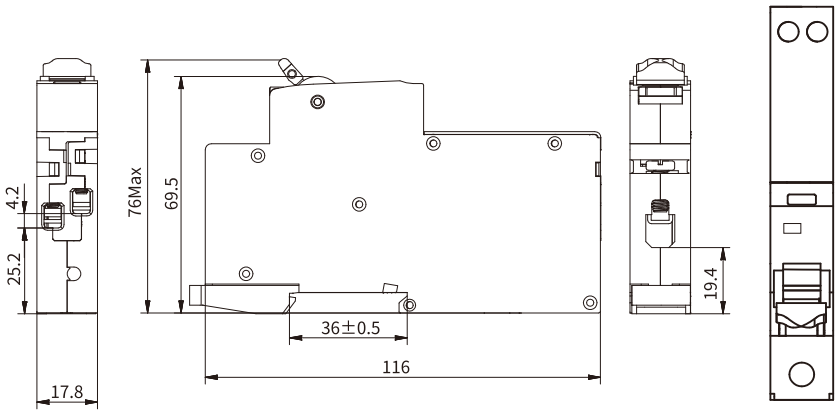
Technical Data

Standard	IEC/EN61009-1
Protection	Ground fault, Overcurrent and short circuit, Over-voltage(selectable)
Type of trip	Ground fault : Electronic
	Overload and short circuit :Thermo-magnetic
Type of protection (electric leakage)	AC,A
No.of poles	1P+N 1module , N line with disconnected
Rated currents (In)	6,10,16,20,25,32,40A
Rated sensitivity currents I△n	10,30,100,300mA
Residual current off-time under I△n	⩽ 0.1s
Rated residual making and breaking capacity(I△m)	500A(In⩽50A)
Rated voltage (Ue)	230/240V~
Rated frequency	50/60Hz
Rated breaking capacity	6,000A
Energy Limiting Class	3
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-25°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	L(in):25mm^2 , N/L(out) :16mm^2
Max. tightening torque	L(in):2.5N.m , N/L(out):2N.m
Installation	Mounting on 35mm DIN rail
Connection	From bottom

EKL7-40AFD 6KA RCBO AFDD

RCBO EKL7-40AFD With Arc Fault Protective ---------- Standard_ IEC62606
IEC61009

Overall and Installation Dimension(mm)



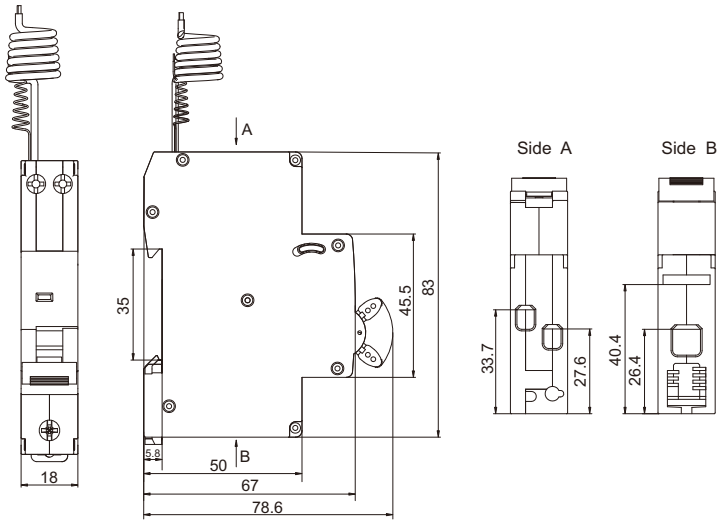
Technical Data

Mode	Electronic
Type	A
Rated current In	6,10,16,20,25,32,40A
Poles	1P+N
Rated voltage Ue	230/240V~
Insulation voltage Ui	500V
Rated frequency	50/60Hz
Rated residual operating current(I△n)	10,30,100,300mA
Break time under I△n	≤0.1s
Rated breaking capacity	6,000A
Energy limiting class	3
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at ind.Freq. for 1min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In
Thermo-magnetic release characteristic	B,C
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-25°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	L(in):25mm^2 , N/L(out) :16mm^2
Max. tightening torque	L(in):2.5N.m , N/L(out):2N.m
Installation	Mounting on 35mm DIN rail
Connection	From bottom

RCBO EKL17-40 6kA

RCCB with Overcurrent Protection ---------- Standard_ IEC61009-1

Overall and Installation Dimension(mm)



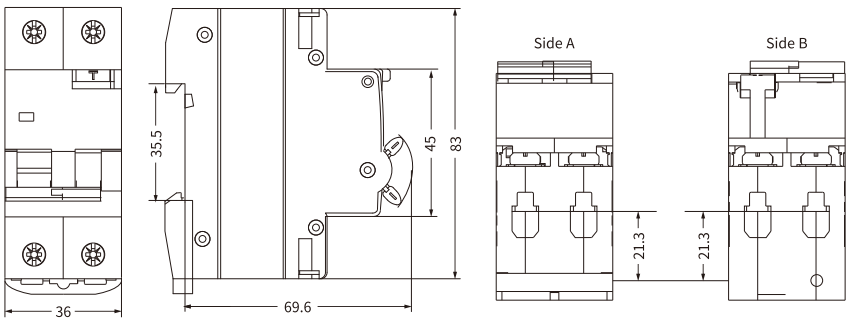
Technical Data

Standard	IEC/EN61009-1
Protection	Ground fault, Overcurrent and short circuit, Over-voltage(selectable)
Type of trip	Ground fault : Electronic
	Overload and short circuit :Thermo-magnetic
Type of protection (electric leakage)	AC,A
No.of poles	1P+N 1module , N line with disconnected
Rated currents (In)	6,10,16,20,25,32,40A
Rated sensitivity currents I△n	10,30,100,300mA
Residual current off-time under I△n	⩽ 0.1s
Rated residual making and breaking capacity(I△m)	500A(In⩽50A)
Rated voltage (Ue)	230/240V~
Rated frequency	50/60Hz
Rated breaking capacity	6,000A
Energy Limiting Class	3
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-25°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	L(in):25mm^2 , N/L(out) :16mm^2
Max. tightening torque	L(in):2.5N.m , N/L(out):2N.m
Installation	Mounting on 35mm DIN rail
Connection	From bottom

RCBO EKL8-40M 6kA

RCCB with Overcurrent Protection ---------- Standard_ IEC61009-1

Overall and Installation Dimension(mm)



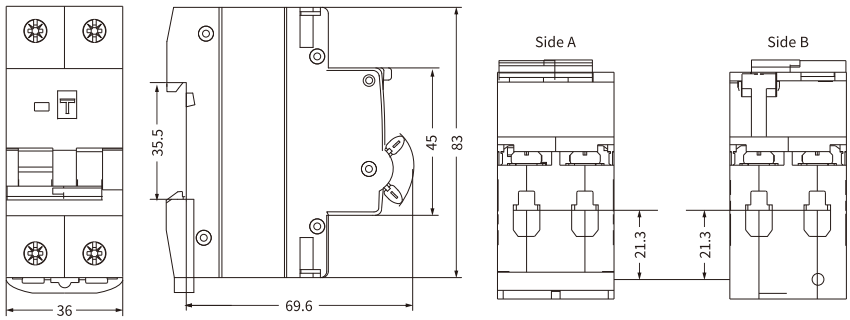
Technical Data

Standard	IEC/EN61009-1
Protection	Ground fault, Overcurrent and short circuit, Over-voltage(selectable)
Type of trip	Ground fault : Electro-magnetic Overload and short circuit :Thermo-magnetic
Type of protection (electric leakage)	AC,A
No.of poles	1P+N 2module , N line with disconnected
Rated currents (In)	6,10,16,20,25,32,40A
Rated sensitivity currents I△n	30,100,300mA
Residual current off-time under I△n	⩽ 0.1s
Rated residual making and breaking capacity(I△m)	500A(In⩽50A)
Rated voltage (Ue)	230/240V~
Rated frequency	50/60Hz
Rated breaking capacity	6,000A
Energy Limiting Class	3
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Ground fault indicator	Yes
Protection degree	IP20
Ambient temperature	-25°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar/Fork-type busbar
Max. terminal size for cable	25mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

RCBO EKL8-80 6kA

RCCB with Overcurrent Protection ---------- Standard_ IEC61009-1

Overall and Installation Dimension(mm)



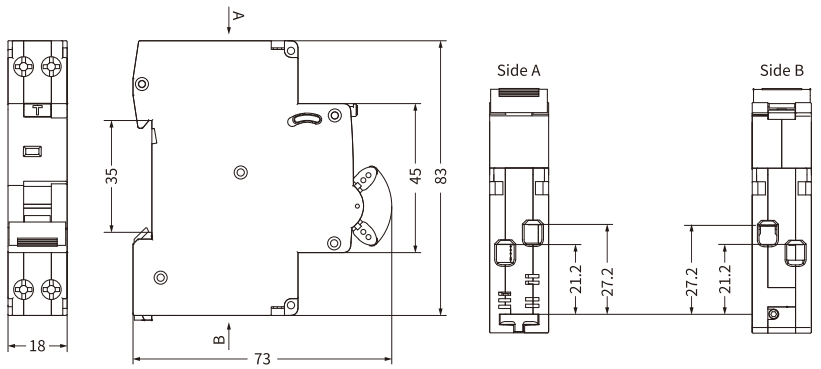
Technical Data

Standard	IEC/EN61009-1
Protection	Ground fault, Overcurrent and short circuit, Over-voltage(selectable)
Type of trip	Ground fault : Electronic Overload and short circuit :Thermo-magnetic
Type of protection (electric leakage)	AC,A
No.of poles	1P+N 2module , N line with disconnected
Rated currents (In)	6,10,16,20,25,32,40A,63A,80A
Rated sensitivity currents I△n	30,100,300mA
Residual current off-time under I△n	⩽ 0.1s
Rated residual making and breaking capacity(I△m)	500A(In⩽50A), 10In(In>50A)
Rated voltage (Ue)	230/240V~
Rated frequency	50/60Hz
Rated breaking capacity	6,000A
Energy Limiting Class	3
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Ground fault indicator	Yes
Protection degree	IP20
Ambient temperature	-25°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar/Fork-type busbar
Max. terminal size for cable	25mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top

RCBO EKL9-40 6kA

RCCB with Overcurrent Protection ---------- Standard_ IEC61009-1

Overall and Installation Dimension(mm)



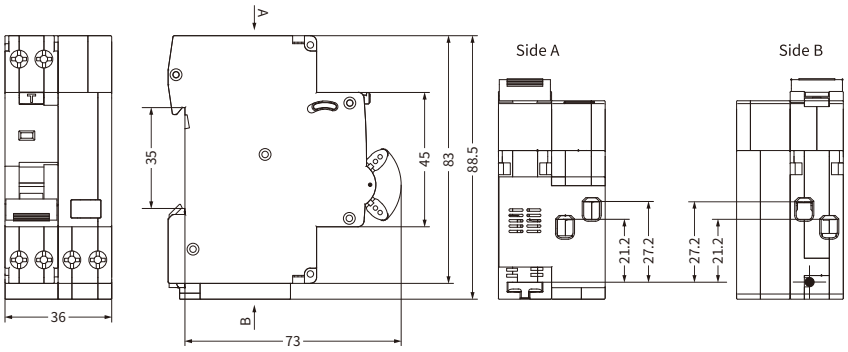
Technical Data

Standard	IEC/EN61009-1
Protection	Ground fault, Overcurrent and short circuit
Type of trip	Ground fault : Electronic Overload and short circuit :Thermo-magnetic
Type of protection (electric leakage)	AC, A
No.of poles	1P+N 1module , N line with disconnected
Rated currents (In)	6,10,16,20,25,32,40A
Rated sensitivity currents I△n	10,30,100,300mA
Residual current off-time under I△n	⩽ 0.1s
Rated residual making and breaking capacity(I△m)	500A(In⩽50A)
Rated voltage (Ue)	230/240V~
Rated frequency	50/60Hz
Rated breaking capacity	6,000A
Energy Limiting Class	3
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-25°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	16mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

EKL9-40AFD RCBO AFDD

RCBO EKL9-40 With Arc Fault Protective ---------- Standard_ IEC61009-1
IEC62606

Overall and Installation Dimension(mm)



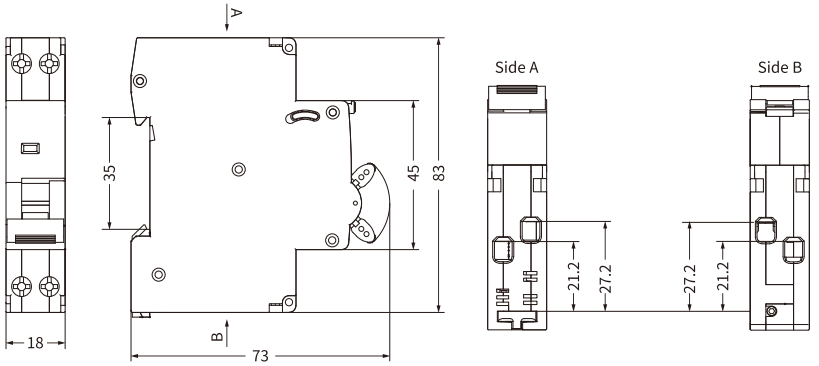
Technical Data

Mode	Electronic
Type	AC, A
Rated current (In)	6, 10, 16, 20, 25, 32, 40A
Poles	1P+N(Pole N could be On/Off)
Rated voltage (Ue)	240V~
Insulation voltage (Ui)	400V
Rated frequency	50Hz
Rated residual operating current(I△n)	10, 30, 100, 300mA
Break time under	⩽0.1s
Rated breaking capacity	6,000A
Energy limiting class	3
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at ind.Freq. for 1min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-25°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	16mm^2
Max. tightening torque	2.5Nm 22In-lbs
Installation	Mounting on 35mm DIN rail
Connection	From top

RCBO EKL19-40 6kA

RCCB with Overcurrent Protection ---------- Standard_ IEC61009-1

Overall and Installation Dimension(mm)



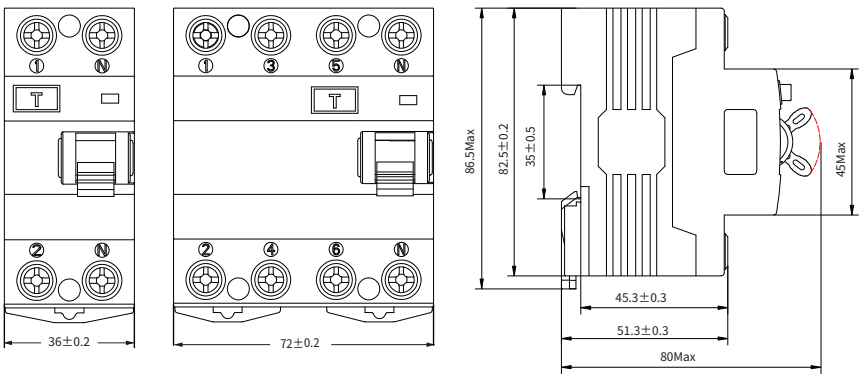
Technical Data

Standard	IEC/EN61009-1
Protection	Ground fault, Overcurrent and short circuit
Type of trip	Ground fault : Electronic
	Overload and short circuit :Thermo-magnetic
Type of protection (electric leakage)	AC,A
No.of poles	1P+N 1module , N line with disconnected
Rated currents (In)	6,10,16,20,25,32,40A
Rated sensitivity currents I△n	10,30,100,300mA
Residual current off-time under I△n	⩽ 0.1s
Rated residual making and breaking capacity(I△m)	500A(In⩽50A)
Rated voltage (Ue)	230/240V~
Rated frequency	50/60Hz
Rated breaking capacity	6,000A
Energy Limiting Class	3
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-25°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	16mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

RCCB EKL1-80(H)

Residual Current Circuit Breaker ---------- Standard_ IEC61008-1

Overall and Installation Dimension(mm)



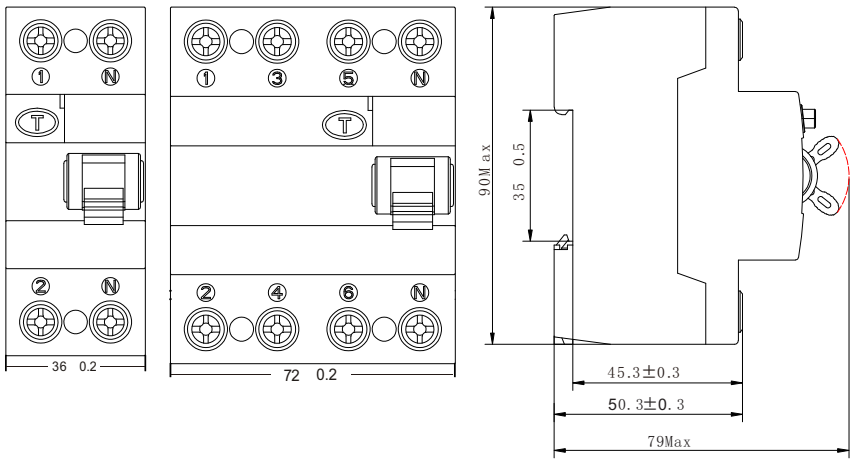
Technical Data

Standard	IEC/EN61008-1
Protection	Ground fault
Type of trip	Electro-magnetic
Type of protection (electric leakage)	AC,A,G,S
No.of poles	2P(1P+N), 4P(3P+N)
Rated currents (In)	25,40,63,80A
Rated sensitivity currents I△n	10,30,100,300mA
Residual current off-time under I△n	⩽ 0.1s
Rated residual making and breaking capacity(I△m)	500A(In⩽50A), 10In(In>50A)
Rated voltage (Ue)	1P+N: 230/240V~, 3P+N:400/415V~
Rated frequency	50/60Hz
Rated breaking capacity	6,000A, 10,000A
SCPD fuse	6000 10000
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2.5kV
Electrical life	2,000 Cycles
Mechanical life	4,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-25°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar/U-type busbar
Max. terminal size for cable	25mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

RCCB EKL1-125H 10kA

Residual Current Circuit Breaker ---------- Standard_ IEC61008-1

Overall and Installation Dimension(mm)



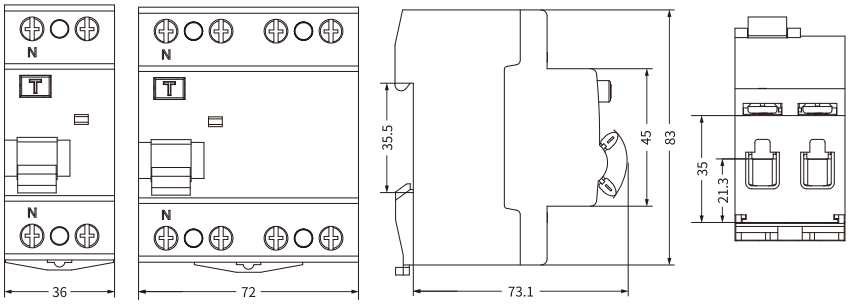
Technical Data

Standard	IEC/EN61008-1
Protection	Ground fault
Type of trip	Electro-magnetic
Type of protection (electric leakage)	AC,A,G,S
No.of poles	2P(1P+N), 4P(3P+N) , N Pole on right
Rated currents (In)	80,100,125A
Rated sensitivity currents I△n	30,100,300mA
Residual current off-time under I△n	⩽ 0.1s
Rated residual making and breaking capacity(I△m)	10In (In>50A)
Rated voltage (Ue)	1P+N: 230/240V~, 3P+N:400/415V~
Rated frequency	50/60Hz
Rated breaking capacity	10,000A
SCPD fuse	10000
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Electrical life	2,000 Cycles
Mechanical life	4,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-25°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar/Fork-type busbar
Max.terminal size for cable	50mm^2
Max.tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

RCCB EKL6-100(H)

Residual Current Circuit Breaker ---------- Standard_ IEC61008-1

Overall and Installation Dimension(mm)



Technical Data

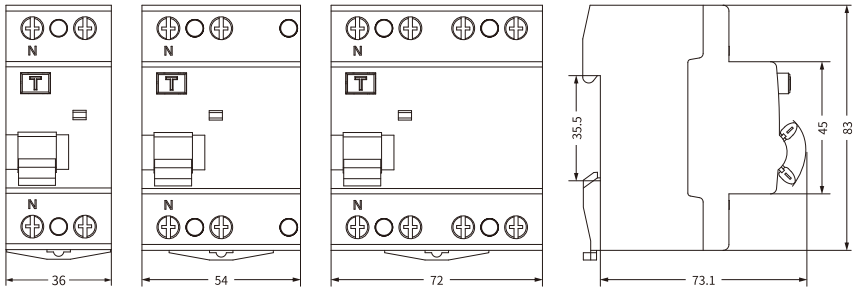
Standard	IEC/EN61008-1
Protection	Ground fault
Type of trip	Electro-magnetic
Type of protection (electric leakage)	AC,A,G,S
No.of poles	2P(1P+N), 4P(3P+N) , N Pole on left
Rated currents (In)	16,25,32,40,63,80,100A
Rated sensitivity currents I△n	10,30,100,300mA (10mA only for In=16-25A)
Residual current off-time under I△n	⩽ 0.1s
Rated residual making and breaking capacity(I△m)	500A(In⩽50A), 10In(In>50A)
Rated voltage (Ue)	1P+N: 230/240V~, 3P+N:400/415V~
Rated frequency	50/60Hz
Rated breaking capacity	6,000A, 10,000A
SCPD fuse	6000 10000
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Electrical life	2,000 Cycles
Mechanical life	4,000 Cycles
Contact position indicator	Yes
Ground fault indicator	Yes
Protection degree	IP20
Ambient temperature	-25°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar/Fork-type busbar
Max. terminal size for cable	35mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

RCCB Type B EKL6-100B

Residual Current Circuit Breaker

Standard_ IEC61008-1
IEC62423

Overall and Installation Dimension(mm)



Technical Data

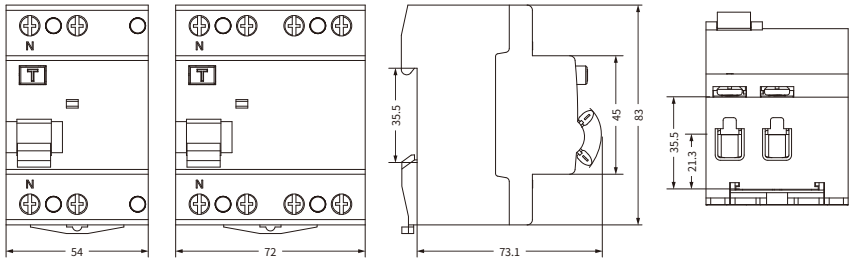
Standard	IEC61008-1, IEC62423
Protection	Ground fault
Type of trip	Electro-magnetic
Type of protection (electric leakage)	B
No.of poles	2P(1P+N), 4P(3P+N), N Pole on left
Insulation voltage Ui	500V
Rated currents (In)	16,25,40,63,80,100A
Rated sensitivity currents I△n	30,100,300mA
Residual current off-time under I△n	⩽ 0.1s
Rated residual making and breaking capacity(I△m)	500A(In⩽50A), 10In(In>50A)
Rated voltage (Ue)	2P: 240V~, 4P: 415V~
Rated frequency	50/60Hz
Rated breaking capacity	10,000A
SCPD fuse	10000
Rated impulse withstand voltage(1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2.5kV
Electrical life	2,000 Cycles
Mechanical life	4,000 Cycles
Contact position indicator	Yes
Ground fault indicator	Yes
Protection degree	IP20
Ambient temperature	-25°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar/Fork-type busbar
Max.terminal size for cable	35mm^2
Max.tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

RCCB Type EV EKL6-63EV

Residual Current Circuit Breaker

Standard_ IEC61008-1
IEC62955

Overall and Installation Dimension(mm)



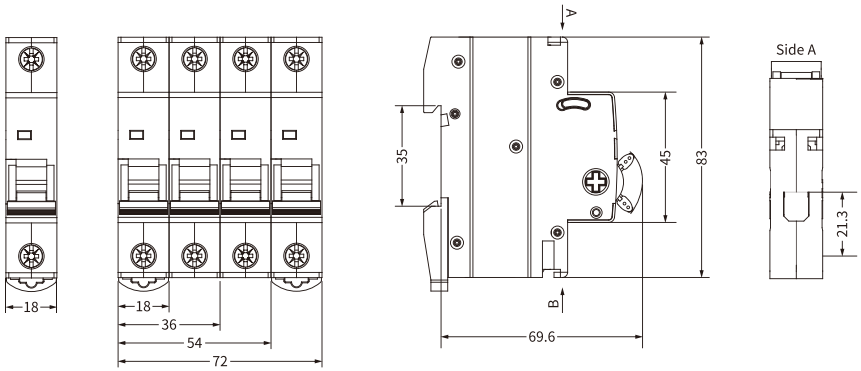
Technical Data

Standard	IEC61008-1, IEC62955
Protection	Ground fault
Type of trip	Electro-magnetic
Type of protection (electric leakage)	A
No.of poles	2P(1P+N), 4P(3P+N) , N Pole on left
Insulation voltage Ui	500V
Rated currents (In)	25,40,63A
Rated sensitivity currents I△n	30mA
Rated residual operating current(I△dc)	6mA
Residual current off-time under I△n	⩽ 0.1s
Rated residual making and breaking capacity(I△m)	500A(In⩽50A), 10In(In>50A)
Rated voltage (Ue)	2P: 240V~, 4P: 415V~
Rated frequency	50/60Hz
Rated breaking capacity	10,000A
SCPD fuse	10000
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2.5kV
Electrical life	2,000 Cycles
Mechanical life	4,000 Cycles
Contact position indicator	Yes
Ground fault indicator	Yes
Protection degree	IP20
Ambient temperature	-25°C to +55°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar/U-type busbar
Max. terminal size for cable	35mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

Technical Data

Standard	IEC/EN60947-3
No.of poles	1P,2P,3P,4P
Rated currents (In)	25,32,40,50,63,80,100,125A
Rated voltage (Ue)	240/415V~
Rated frequency	50/60Hz
Utilization category	AC-22A
Short-time withstand current Icw	12Ie, t=1s
Rated short-circuit making capacity Icm	20Ie, t=0.1s
Rated making & breaking capacity	3Ie, 1.05Ue, CosΦ=0.65
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Rated insulation voltage Ui	690V
Electrical life	2,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-5°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	50mm^2
Max. tightening torque	3.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

Overall and Installation Dimension(mm)



EKM2-UT

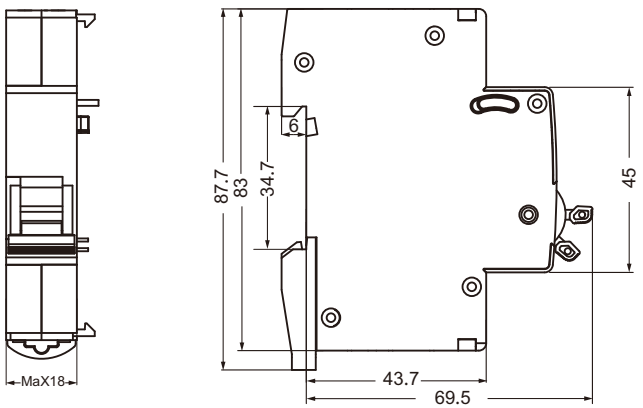
Over/Under-voltage Tripper

Standard_ IEC60947-5-1

Technical Data

Rated value	AC230V 50/60Hz
	70-35%Ue, reliable operation
	<35%Ue,prevent breaker from making
	85~110%Ue,reliable operation
Rated impulse withstand voltage (1.2/50)Uimp	4,000V
Dielectric test voltage at ind. Freq. for 1min	2kV
Insulation voltage Ui	500V
Pollution degree	2
Electrical life	4000 Cycles
Mechanical life	4000 Cycles
Protection degree	IP20
Ambient temperature (with daily average≤35°C)	-5°C~+40°C
Storage temperature	-25°C~+70°C
Terminal connection type	Cable
Terminal size top/bottom for cable	2.5mm^2 18-14AWG
Tightening torque	0.8 N.m 7In-lbs

Overall and Installation Dimension(mm)



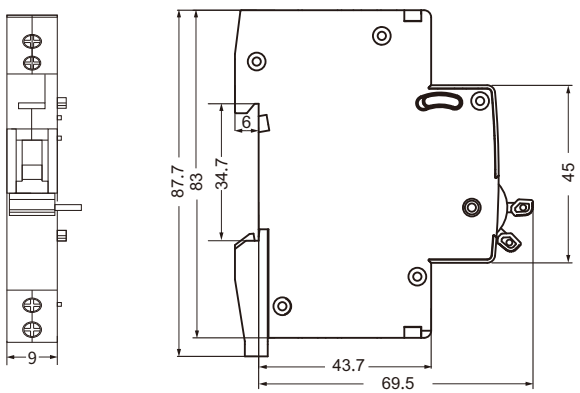
EKM2-OF EKM2-FB

Auxiliary Contact for EKM2 MCB Alarm Auxiliary Contact for EKM2 MCB --------- Standard_ IEC60947-5-1

Technical Data

Rated value	UN(V)	IN(A)
	AC 415 50/60Hz	3
	AC 240 50/60Hz	6
	DC130	1
	DC48	2
	DC24	6
Configurations	EKM2-OF 1N/O+1N/C	
	EKM2-FB 1N/O+1N/C	
Rated impulse withstand voltage (1.2/50)Uimp	4,000V	
Dielectric test voltage at ind. Freq. for 1min	2kV	
Insulation voltage Ui	500V	
Pollution degree	2	
Electrical life	6,050 Cycles	
Mechanical life	10,000 Cycles	
Protection degree	IP20	
Ambient temperature (with daily average≤35°C)	-5°C~+40°C	
Storage temperature	-25°C~+70°C	
Terminal connection type	Cable	
Terminal size top/bottom for cable	2.5mm² 18-14AWG	
Tightening torque	0.8 N.m 7In-lbs	

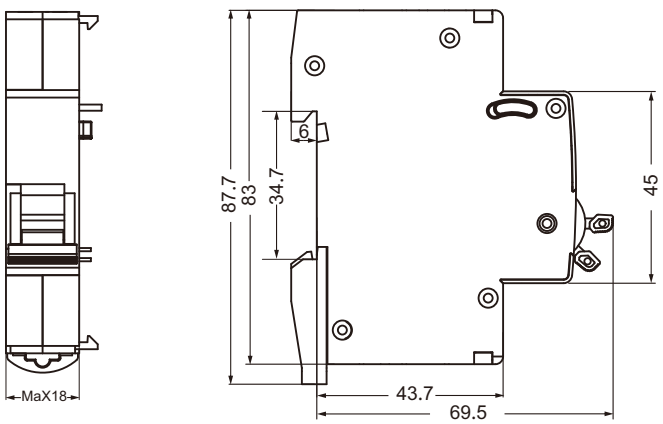
Overall and Installation Dimension(mm)



Technical Data

Rated value	AC230V/400V 50/60Hz
	AC/DC24V
	AC/DC48V
Rated impulse withstand voltage (1.2/50)Uimp	4,000V
Dielectric test voltage at ind. Freq. for 1min	2kV
Insulation voltage Ui	500V
Pollution degree	2
Electrical life	4000 Cycles
Mechanical life	4000 Cycles
Protection degree	IP20
Ambient temperature (with daily average≤35°C)	-5°C~+40°C
Storage temperature	-25°C~+70°C
Terminal connection type	Cable
Terminal size top/bottom for cable	2.5mm^2 18-14AWG
Tightening torque	0.8 N.m 7In-lbs

Overall and Installation Dimension(mm)



Modular S3 Series

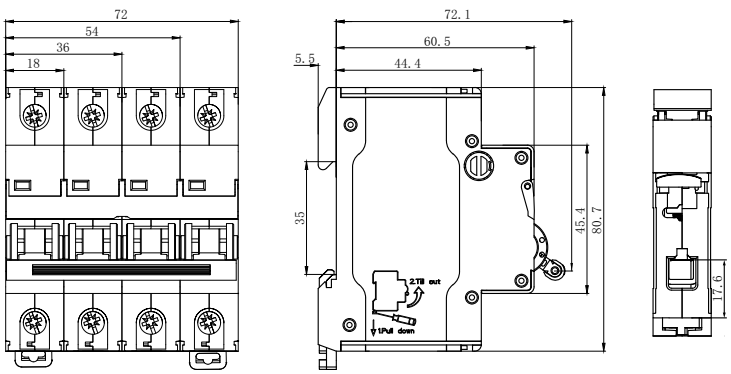
MCB EKM3-63S 4.5kA

Mini Circuit Breaker ---------- Standard_ IEC60898-1

Technical Data

Standard	IEC/EN60898-1
Protection	Overcurrent and short circuit
Type of trip	Thermo-magnetic
No.of poles	1P,1P+N,2P,3P,3P+N,4P
Rated currents (In)	1,2,3,4,5,6,10,16,20,25,32,40,50,63A
Rated voltage (Ue)	240/415V~
Rated frequency	50/60Hz
Rated breaking capacity	4,500A
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In, D:(10-20) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-5°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	25mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

Overall and Installation Dimension(mm)



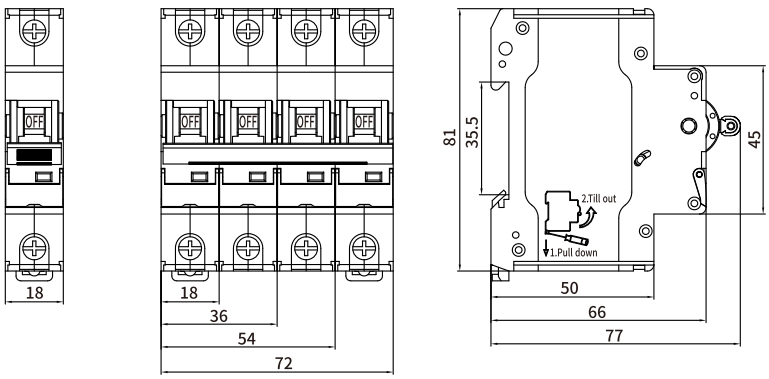
MCB EKM3-63 6kA

Mini Circuit Breaker ---------- Standard_ IEC60898-1
IEC60947-2

Technical Data

Standard	IEC/EN60898-1	IEC/EN60947-2
Protection	Overcurrent and short circuit	
Type of trip	Thermo-magnetic	
No.of poles	1P,1P+N,2P,3P,3P+N,4P	
Rated currents (In)	1,2,3,4,5,6,10,16,20,25,32,40,50,63A	
Rated voltage (Ue)	240/415V~	
Rated frequency	50/60Hz	
Rated breaking capacity	6,000A	
Energy Limiting Class	3	
Rated impulse withstand voltage (1.2/50) Uimp	6,000V	
Dielectric test voltage at Ind. Freq.for 1 min	2kV	
Thermal release characteristic	(1.13-1.45) x In	(1.05-1.30) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In	(8-12) x In
Electrical life	8,000 Cycles	
Mechanical life	20,000 Cycles	
Contact position indicator	Yes	
Protection degree	IP20	
Ambient temperature	-5°C to +40°C, Max.95% humidity	
Terminal connection type	Cable/Pin-type busbar	
Max. terminal size for cable	25mm^2	
Max. tightening torque	2.5N.m	
Installation	Mounting on 35mm DIN rail	
Connection	From top and bottom	

Overall and Installation Dimension(mm)



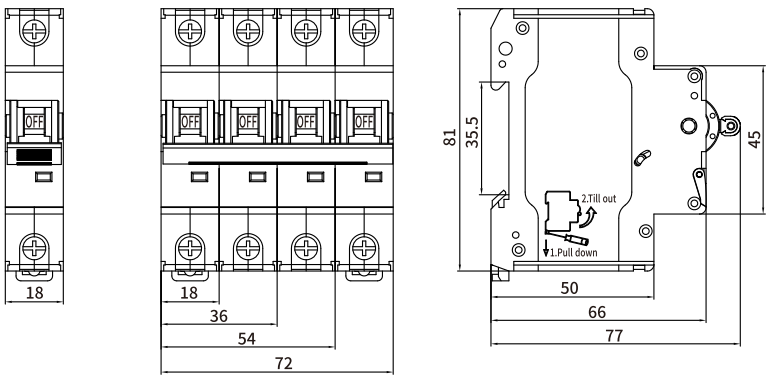
MCB EKM3-63H 10kA

Mini Circuit Breaker ---------- Standard_ IEC60898-1

Technical Data

Standard	IEC/EN60898-1
Protection	Overcurrent and short circuit
Type of trip	Thermo-magnetic
No.of poles	1P,1P+N,2P,3P,3P+N,4P
Rated currents (In)	1,2,3,4,5,6,10,16,20,25,32,40,50,63A
Rated voltage (Ue)	240/415V~
Rated frequency	50/60Hz
Rated breaking capacity	10,000A
Energy Limiting Class	3
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In, D:(10-20) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-5°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	25mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

Overall and Installation Dimension(mm)



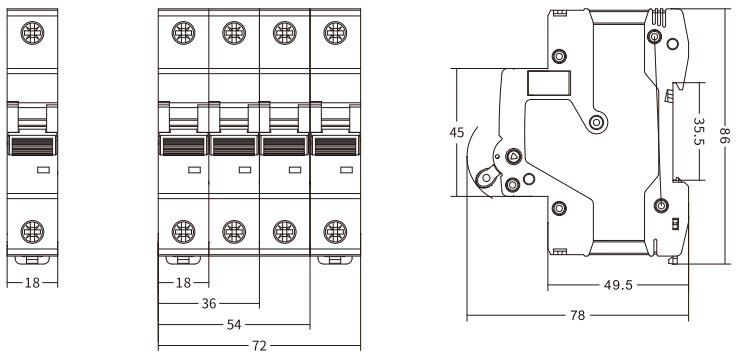
MCB EKM3-100 6kA

Mini Circuit Breaker ---------- Standard_ IEC60898-1

Technical Data

Standard	IEC/EN60898-1
Protection	Overcurrent and short circuit
Type of trip	Thermo-magnetic
No.of poles	1P,1P+N,2P,3P,3P+N,4P
Rated currents (In)	63,80,100A
Rated voltage (Ue)	240/415V~
Rated frequency	50/60Hz
Rated breaking capacity	6,000A
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Thermo-magnetic release characteristic	C:(5-10) x In, D:(10-20) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-5°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	50mm^2
Max. tightening torque	3.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

Overall and Installation Dimension(mm)



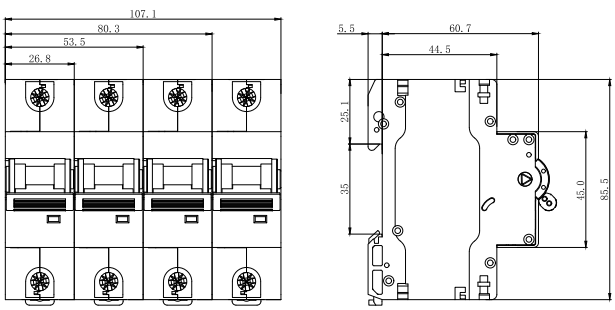
MCB EKM3-125H 10kA

Mini Circuit Breaker ---------- Standard_ IEC60898-1
IEC60947-2

Technical Data

Standard	IEC/EN60898-1	IEC/EN60947-2
Protection	Overcurrent and short circuit	
Type of trip	Thermo-magnetic	
No.of poles	1P,1P+N,2P,3P,3P+N,4P	
Rated currents (In)	80,100,125A	
Rated voltage (Ue)	240/415V~	
Rated frequency	50/60Hz	
Rated breaking capacity	6,000A	10,000A
Rated impulse withstand voltage (1.2/50) Uimp	4,000V	
Dielectric test voltage at Ind. Freq.for 1 min	2kV	
Thermal release characteristic	(1.13-1.45) x In	(1.05-1.30) x In
Thermo-magnetic release characteristic	C:(5-10) x In, D:(10-20) x In	(8-12) x In
Electrical life	4,000 Cycles	
Mechanical life	10,000 Cycles	
Contact position indicator	Yes	
Protection degree	IP20	
Ambient temperature	-5°C to +40°C, Max.95% humidity	
Terminal connection type	Cable/Pin-type busbar	
Max. terminal size for cable	50mm^2	
Max. tightening torque	3.5N.m	
Installation	Mounting on 35mm DIN rail	
Connection	From top and bottom	

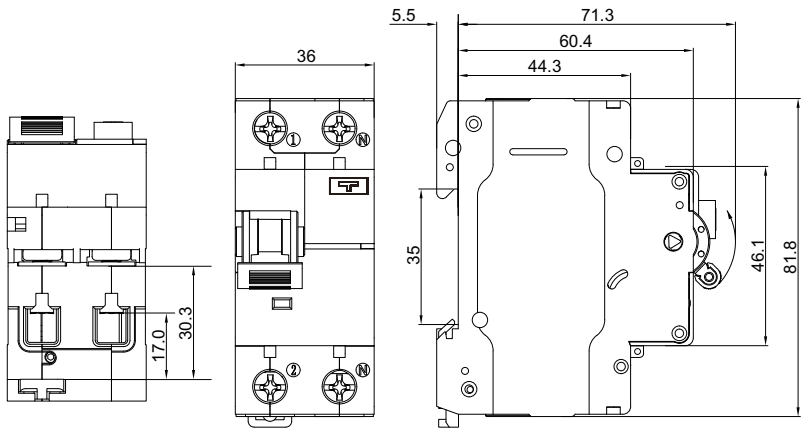
Overall and Installation Dimension(mm)



RCBO EKL13-63

RCCB with Overcurrent Protection ---------- Standard_ IEC61009-1

Overall and Installation Dimension(mm)



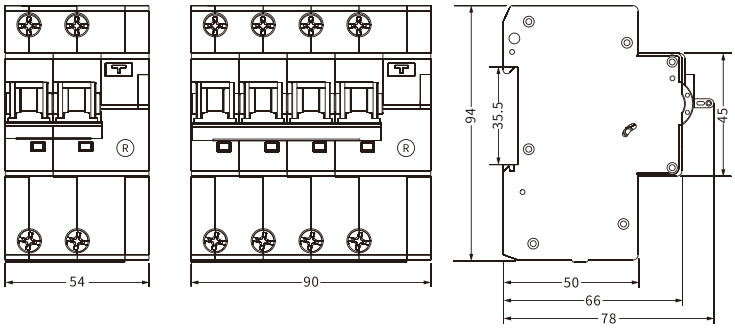
Technical Data

Standard	IEC/EN61009-1
Protection	Ground fault, Overcurrent and short circuit, Over-voltage(selectable)
Type of trip	Ground fault : Electronic Overload and short circuit :Thermo-magnetic
Type of protection (electric leakage)	AC,A
No.of poles	1P+N 2module , N line with disconnected
Rated currents (In)	6,10,16,20,25,32,40,50,63A
Rated sensitivity currents I△n	10,30,100,300mA
Residual current off-time under I△n	⩽ 0.1s
Rated residual making and breaking capacity(I△m)	500A(In⩽50A), 10In(In>50A)
Rated voltage (Ue)	230/240V~
Rated frequency	50/60Hz
Rated breaking capacity	6,000A
Energy Limiting Class	3
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Ground fault indicator	Yes
Protection degree	IP20
Ambient temperature	-25°C to +55°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar/Fork-type busbar
Max. terminal size for cable	25mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

RCBO EKL15-63(H)

RCCB with Overcurrent Protection ---------- Standard_ IEC61009-1

Overall and Installation Dimension(mm)



Technical Data

Standard	IEC/EN61009-1
Protection	Ground fault, Overcurrent and short circuit, Over-voltage(selectable)
Type of trip	Ground fault : Electronic Overload and short circuit :Thermo-magnetic
Type of protection (electric leakage)	AC,A,S
No.of poles	1P+N 3module , 3P+N 5module, N line with disconnected
Rated currents (In)	6,10,16,20,25,32,40,50,63A
Rated sensitivity currents I△n	10,30,100,300mA
Residual current off-time under I△n	⩽ 0.1s
Rated residual making and breaking capacity(I△m)	500A(In⩽50A), 10In(In>50A)
Rated voltage (Ue)	1P+N:230/240V~,3P+N:400/415V~
Rated frequency	50/60Hz
Rated breaking capacity	6,000A, 10,000A
Energy Limiting Class	3
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In, D:(10-20) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Ground fault indicator	Yes
Protection degree	IP20
Ambient temperature	-25°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	25mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top

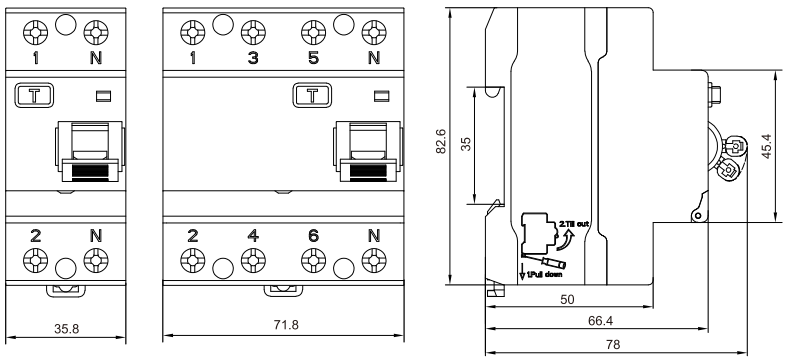
RCCB EKL11-63

Residual Current Circuit Breaker ---------- Standard_ IEC61008-1

EKL11-63T-4P

EKL11-63-4P

Overall and Installation Dimension(mm)



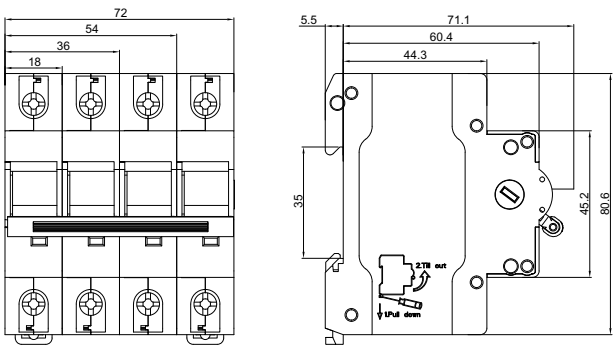
Technical Data

Model	EKL11-63(H)T With Transparent Cover for Line Mark	EKL11-63(H) Without Transparent Cover
Standard	IEC/EN61008-1	
Protection	Ground fault	
Type of trip	Electro-magnetic	
Type of protection (electric leakage)	AC,A,G,S	
No.of poles	2P(1P+N), 4P(3P+N) , N Pole on right	
Rated currents (In)	16,25,32,40,63A	
Rated sensitivity currents I△n	10,30,100,300mA (10mA only for In=16-25A)	
Residual current off-time under I△n	⩽ 0.1s	
Rated residual making and breaking capacity(I△m)	500A(In⩽50A), 10In(In>50A)	
Rated voltage (Ue)	1P+N: 230/240V~, 3P+N:400/415V~	
Rated frequency	50/60Hz	
Rated breaking capacity	6,000A, 10,000A	
SCPD fuse	6000 10000	
Rated impulse withstand voltage (1.2/50) Uimp	4,000V	
Dielectric test voltage at Ind. Freq.for 1 min	2kV	
Electrical life	2,000 Cycles	
Mechanical life	4,000 Cycles	
Contact position indicator	Yes	
Protection degree	IP20	
Ambient temperature	-25°C to +40°C, Max.95% humidity	
Terminal connection type	Cable/Pin-type busbar/Fork-type busbar	
Max.terminal size for cable	25mm^2	
Max.tightening torque	2.5N.m	
Installation	Mounting on 35mm DIN rail	
Connection	From top and bottom	

Technical Data

Standard	IEC/EN60947-3
No.of poles	1P,2P,3P,4P
Rated currents (In)	16,20,32,40,50,63,80,100,125A
Rated voltage (Ue)	240/415V~
Rated frequency	50/60Hz
Utilization category	AC-22A
Short-time withstand current Icw	12Ie, t=1s
Rated short-circuit making capacity Icm	20Ie, t=0.1s
Rated making & breaking capacity	3Ie, 1.05Ue, CosΦ=0.65
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Rated insulation voltage Ui	690V
Electrical life	2,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-5°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max.terminal size for cable	50mm^2
Max.tightening torque	3.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

Overall and Installation Dimension(mm)



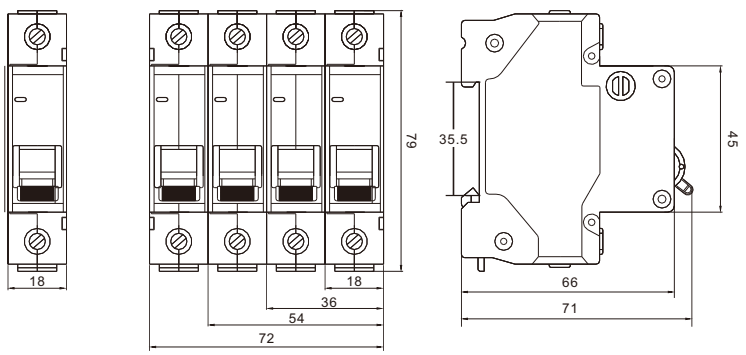
DZ47-63S Economic Type MCB

Mini Circuit Breaker ---------- Standard_ IEC60898-1

Technical Data

Standard	IEC/EN60898-1
Type of trip	Thermo-magnetic
No.of poles	1P,1P+N,2P,3P,3P+N,4P
Rated currents (In)	1,2,3,4,5,6,10,16,20,25,32,40,50,63A
Rated voltage (Ue)	240/415V~
Rated frequency	50/60Hz
Rated breaking capacity	4,500A
Rated impulse withstand voltage (1.2/50) Uimp	4,000V
Dielectric test voltage at Ind. Freq.for 1 min	2kV
Rated insulation voltage Ui	500V
Thermal release characteristic	(1.13-1.45) x In
Magnetic release characteristic	B:(3-5) x In, C:(5-10) x In, D:(10-20) x In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Protection degree	IP20
Ambient temperature	-5°C to +40°C, Max.95% humidity
Terminal connection type	Cable/Pin-type busbar
Max. terminal size for cable	25mm^2
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From top and bottom

Overall and Installation Dimension(mm)



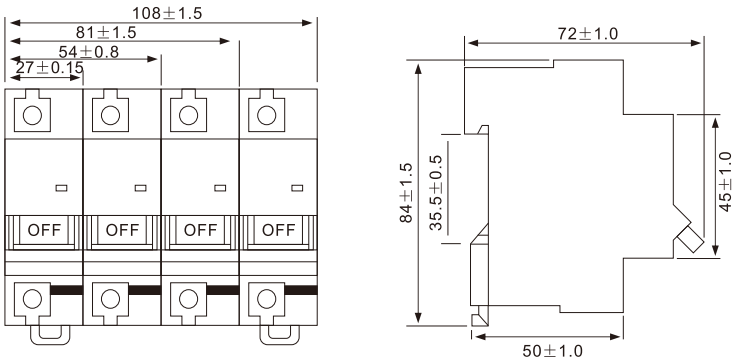
EKM2-125 Economic Type MCB 6kA

Mini Circuit Breaker ---------- Standard_ IEC60898-1
IEC60947-2

Technical Data

Standard	IEC/EN60898-1	IEC/EN60947-2
Type of trip	Thermo-magnetic	
No.of poles	1P,1P+N,2P,3P,3P+N,4P	
Rated currents (In)	63,80,100,125A	
Rated voltage (Ue)	240/415V~	
Rated frequency	50/60Hz	
Rated breaking capacity	6,000A	
Rated impulse withstand voltage (1.2/50) Uimp	4,000V	
Dielectric test voltage at Ind. Freq.for 1 min	2kV	
Rated insulation voltage Ui	500V	
Thermal release characteristic	(1.13-1.45) x In	(1.05-1.30) x In
Thermo-magnetic release characteristic	B:(3-5) x In, C:(5-10) x In	(8-12) x In
Electrical life	4,000 Cycles	
Mechanical life	10,000 Cycles	
Contact position indicator	Yes	
Protection degree	IP20	
Ambient temperature	-5°C to +40°C, Max.95% humidity	
Terminal connection type	Cable/Pin-type busbar	
Max. terminal size for cable	50mm^2	
Max. tightening torque	3.5N.m	
Installation	Mounting on 35mm DIN rail	
Connection	From top and bottom	

Overall and Installation Dimension(mm)



Surge Protective Device

Product Selection Guide

EK U5- T1+T2 - 7 - 1P - 275 S

- With Remote Signaling
- Uc: 150:150V,275:275V,320:320V, 385:385V,440:440V
- No. of Poles: 1:1P,2:2P,3:3P, 4:4P,1PN:1P+NPE,3PN:3P+NPE
- Iimp: 7kA
- Classification T1+T2
- SPD serie No.5
- Company Code

EKU5-T1+T2-7
2P

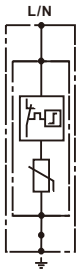
EKU5-T1+T2-7
1P+NPE

EKU5-T1+T2-7
3P

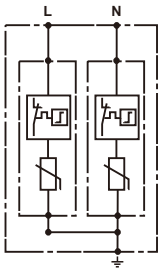
EKU5-T1+T2-7
4P

EKU5-T1+T2-7
3P+NPE

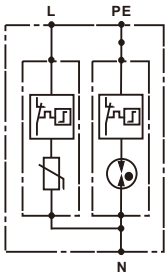
Basic Circuit Diagram



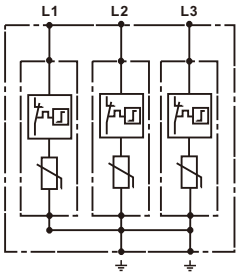
1P



2P



1P+NPE



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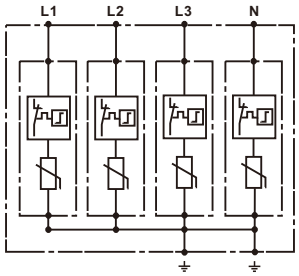

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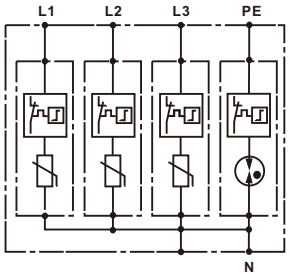


3P+NPE

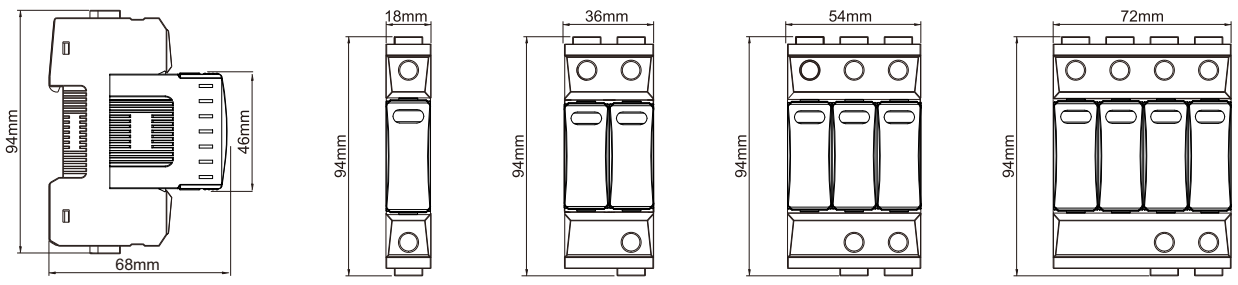
SPD Type Reference List

No. of Poles	Max. Continuous Operating AC Voltage				
	150V	275V	320V	385V	440V
1P	EKU5-T1+T2-7-1P150	EKU5-T1+T2-7-1P275	EKU5-T1+T2-7-1P320	EKU5-T1+T2-7-1P385	EKU5-T1+T2-7-1P440
2P	EKU5-T1+T2-7-2P150	EKU5-T1+T2-7-2P275	EKU5-T1+T2-7-2P320	EKU5-T1+T2-7-2P385	EKU5-T1+T2-7-2P440
3P	EKU5-T1+T2-7-3P150	EKU5-T1+T2-7-3P275	EKU5-T1+T2-7-3P320	EKU5-T1+T2-7-3P385	EKU5-T1+T2-7-3P440
4P	EKU5-T1+T2-7-4P150	EKU5-T1+T2-7-4P275	EKU5-T1+T2-7-4P320	EKU5-T1+T2-7-4P385	EKU5-T1+T2-7-4P440
1P+NPE	EKU5-T1+T2-7-1PN150	EKU5-T1+T2-7-1PN275	EKU5-T1+T2-7-1PN320	EKU5-T1+T2-7-1PN385	EKU5-T1+T2-7-1PN440
3P+NPE	EKU5-T1+T2-7-3PN150	EKU5-T1+T2-7-3PN275	EKU5-T1+T2-7-3PN320	EKU5-T1+T2-7-3PN385	EKU5-T1+T2-7-3PN440
With Remote Signaling					
1P	EKU5-T1+T2-7-1P150S	EKU5-T1+T2-7-1P275S	EKU5-T1+T2-7-1P320S	EKU5-T1+T2-7-1P385S	EKU5-T1+T2-7-1P440S
2P	EKU5-T1+T2-7-2P150S	EKU5-T1+T2-7-2P275S	EKU5-T1+T2-7-2P320S	EKU5-T1+T2-7-2P385S	EKU5-T1+T2-7-2P440S
3P	EKU5-T1+T2-7-3P150S	EKU5-T1+T2-7-3P275S	EKU5-T1+T2-7-3P320S	EKU5-T1+T2-7-3P385S	EKU5-T1+T2-7-3P440S
4P	EKU5-T1+T2-7-4P150S	EKU5-T1+T2-7-4P275S	EKU5-T1+T2-7-4P320S	EKU5-T1+T2-7-4P385S	EKU5-T1+T2-7-4P440S
1P+NPE	EKU5-T1+T2-7-1PN150S	EKU5-T1+T2-7-1PN275S	EKU5-T1+T2-7-1PN320S	EKU5-T1+T2-7-1PN385S	EKU5-T1+T2-7-1PN440S
3P+NPE	EKU5-T1+T2-7-3PN150S	EKU5-T1+T2-7-3PN275S	EKU5-T1+T2-7-3PN320S	EKU5-T1+T2-7-3PN385S	EKU5-T1+T2-7-3PN440S

Technical Data

SPD classification according to IEC/EN61643-11		T1+T2	T1+T2	T1+T2	T1+T2	T1+T2
Max. continuous operating a.c.voltage	Uc	150V	275V	320V	385V	440V
Max. continuous operating a.c.voltage	Uc(N-PE)	255V	255V	255V	255V	255V
Lightning impulse current (10/350μs)	limp	7kA	7kA	7kA	7kA	7kA
Norminal discharge current (8/20μs)	In	25kA	25kA	25kA	25kA	25kA
Maximum discharge current (8/20μs)	Imax	50kA	50kA	50kA	50kA	50kA
Voltage protection level	Up	⩽1.2kV	⩽1.4kV	⩽1.6kV	⩽1.8kV	⩽2.0kV
Voltage protection level 5kA	Up	⩽1.0kV	⩽1.2kV	⩽1.4kV	⩽1.5kV	⩽1.6kV
Voltage protection level	Up(N-PE)	⩽1.5kV	⩽1.5kV	⩽1.5kV	⩽1.5kV	⩽1.5kV
Max. backup fuse		160A gL				
Response time	tA	⩽25ns				
Response time	tA(N-PE)	⩽100ns				
Operating temperature range	Tu	-40°C~80°C				
Operating State/Fault Indication		Green/Red				
Cross-section area (Min.)		4mm^2				
Cross-section area (Max.)		35mm^2				
For mounting on		35mm Din rail				
Enclosure material		Thermal Plastic UL94-V0				
Degree of Protection		IP20				
No. of Poles		1P, 2P, 3P, 4P, 1P+NPE, 3P+NPE				

Overall and Installation Dimension(mm)



Product Selection Guide

EK U5- T1+T2 12 - 1P - 275 S

- S: With Remote Signaling
- 275: Uc: 150:150V,275:275V,320:320V,385:385V
- 1P: No. of Poles: 1:1P,2:2P,3:3P, 4:4P,1PN:1P+NPE,3PN:3P+NPE
- 12: Iimp: 12.5kA
- T1+T2: Classification T1+T2
- U5: SPD serie No.5
- EK: Company Code

EKU5-T1+T2-12
2P

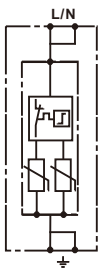
EKU5-T1+T2-12
1P+NPE

EKU5-T1+T2-12
3P

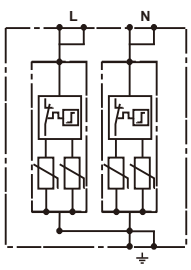
EKU5-T1+T2-12
4P

EKU5-T1+T2-12
3P+NPE

Basic Circuit Diagram



1P



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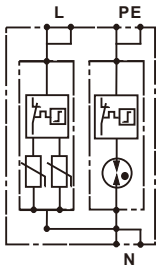
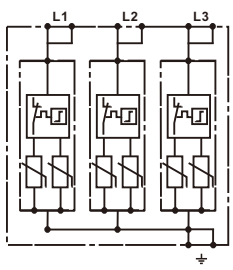


1P+NPE



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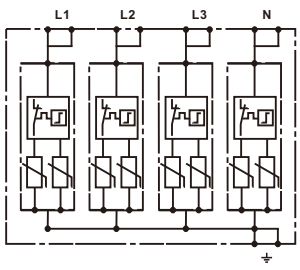

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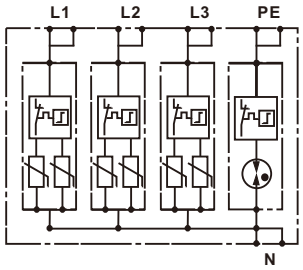


3P+NPE

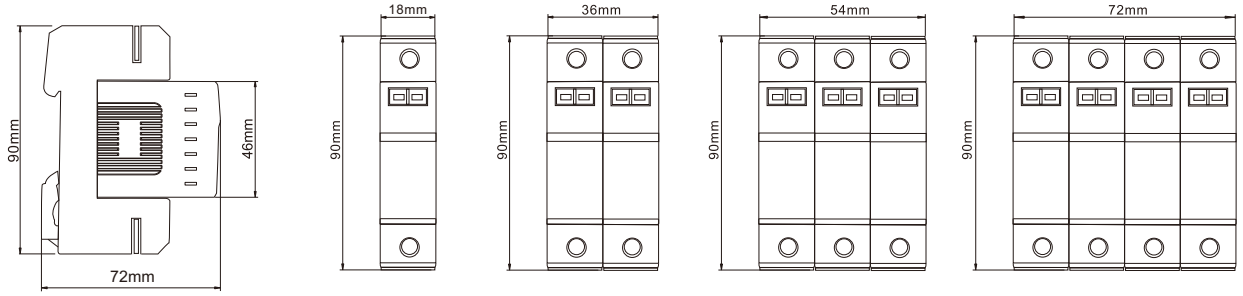
SPD Type Reference List

No. of Poles	Max. Continuous Operating AC Voltage			
	150V	275V	320V	385V
1P	EKU5-T1+T2-12-1P150	EKU5-T1+T2-12-1P275	EKU5-T1+T2-12-1P320	EKU5-T1+T2-12-1P385
2P	EKU5-T1+T2-12-2P150	EKU5-T1+T2-12-2P275	EKU5-T1+T2-12-2P320	EKU5-T1+T2-12-2P385
3P	EKU5-T1+T2-12-3P150	EKU5-T1+T2-12-3P275	EKU5-T1+T2-12-3P320	EKU5-T1+T2-12-3P385
4P	EKU5-T1+T2-12-4P150	EKU5-T1+T2-12-4P275	EKU5-T1+T2-12-4P320	EKU5-T1+T2-12-4P385
1P+NPE	EKU5-T1+T2-12-1PN150	EKU5-T1+T2-12-1PN275	EKU5-T1+T2-12-1PN320	EKU5-T1+T2-12-1PN385
3P+NPE	EKU5-T1+T2-12-3PN150	EKU5-T1+T2-12-3PN275	EKU5-T1+T2-12-3PN320	EKU5-T1+T2-12-3PN385
With Remote Signaling				
1P	EKU5-T1+T2-12-1P150S	EKU5-T1+T2-12-1P275S	EKU5-T1+T2-12-1P320S	EKU5-T1+T2-12-1P385S
2P	EKU5-T1+T2-12-2P150S	EKU5-T1+T2-12-2P275S	EKU5-T1+T2-12-2P320S	EKU5-T1+T2-12-2P385S
3P	EKU5-T1+T2-12-3P150S	EKU5-T1+T2-12-3P275S	EKU5-T1+T2-12-3P320S	EKU5-T1+T2-12-3P385S
4P	EKU5-T1+T2-12-4P150S	EKU5-T1+T2-12-4P275S	EKU5-T1+T2-12-4P320S	EKU5-T1+T2-12-4P385S
1P+NPE	EKU5-T1+T2-12-1PN150S	EKU5-T1+T2-12-1PN275S	EKU5-T1+T2-12-1PN320S	EKU5-T1+T2-12-1PN385S
3P+NPE	EKU5-T1+T2-12-3PN150S	EKU5-T1+T2-12-3PN275S	EKU5-T1+T2-12-3PN320S	EKU5-T1+T2-12-3PN385S

Technical Data

SPD classification according to IEC/EN61643-11		T1+T2	T1+T2	T1+T2	T1+T2
Max. continuous operating a.c.voltage	Uc	150V	275V	320V	385V
Max. continuous operating a.c.voltage	Uc(N-PE)	255V	255V	255V	255V
Lightning impulse current (10/350μs)	limp	12.5kA	12.5kA	12.5kA	12.5kA
Norminal discharge current (8/20μs)	In	30kA	30kA	30kA	30kA
Maximum discharge current (8/20μs)	Imax	60kA	60kA	60kA	60kA
Voltage protection level	Up	⩽1.2kV	⩽1.5kV	⩽1.6kV	⩽1.8kV
Voltage protection level 5kA	Up	⩽0.6kV	⩽1.0kV	⩽1.2kV	⩽1.3kV
Voltage protection level	Up(N-PE)	⩽1.5kV	⩽1.5kV	⩽1.5kV	⩽1.5kV
Max. backup fuse		160A gL			
Response time	tA	⩽25ns			
Response time	tA(N-PE)	⩽100ns			
Operating temperature range	Tu	-40°C~80°C			
Operating State/Fault Indication		Green/Red			
Cross-section area (Min.)		4mm^2			
Cross-section area (Max.)		35mm^2			
For mounting on		35mm Din rail			
Enclosure material		Thermal Plastic UL94-V0			
Degree of Protection		IP20			
No. of Poles		1P, 2P, 3P, 4P, 1P+NPE, 3P+NPE			

Overall and Installation Dimension(mm)



Product Selection Guide

EK U5 - T2 - 20 - 1P - 275 S

- S: With Remote Signaling
- 275: Uc: 150:150V,275:275V,320:320V, 385:385V,440:440V
- 1P: No. of Poles: 1:1P,2:2P,3:3P, 4:4P,1PN:1P+NPE,3PN:3P+NPE
- 20: I.max: 20kA
- T2: Classification T2
- U5: SPD serie No.5
- EK: Company Code

EKU5-T2-20
2P

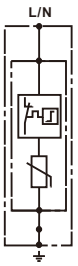
EKU5-T2-20
1P+NPE

EKU5-T2-20
3P

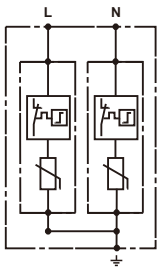
EKU5-T2-20
4P

EKU5-T2-20
3P+NPE

Basic Circuit Diagram



1P



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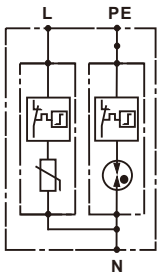
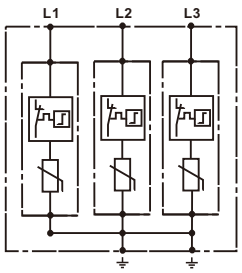


1P+NPE



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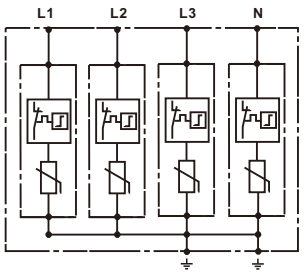
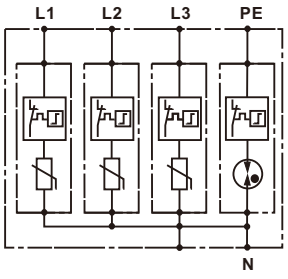


4P



3P+NPE

EKU5-T2-20 SPD TYPE T2

Standard_ IEC/EN61643-11

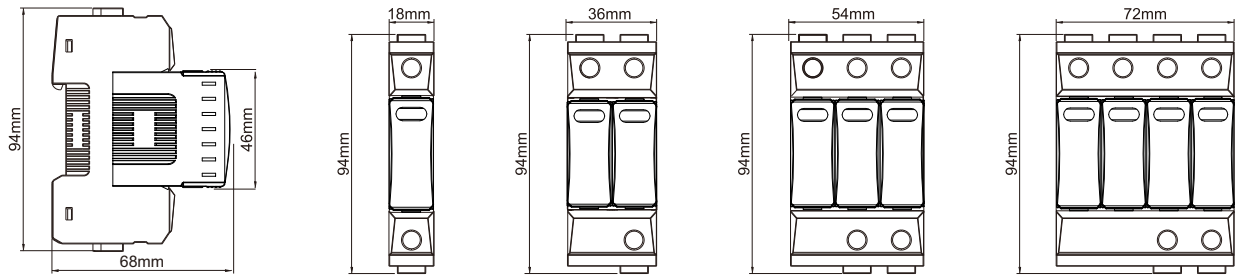
SPD Type Reference List

No. of Poles	Max. Continuous Operating AC Voltage				
	150V	275V	320V	385V	440V
1P	EKU5-T2-20-1P150	EKU5-T2-20-1P275	EKU5-T2-20-1P320	EKU5-T2-20-1P385	EKU5-T2-20-1P440
2P	EKU5-T2-20-2P150	EKU5-T2-20-2P275	EKU5-T2-20-2P320	EKU5-T2-20-2P385	EKU5-T2-20-2P440
3P	EKU5-T2-20-3P150	EKU5-T2-20-3P275	EKU5-T2-20-3P320	EKU5-T2-20-3P385	EKU5-T2-20-3P440
4P	EKU5-T2-20-4P150	EKU5-T2-20-4P275	EKU5-T2-20-4P320	EKU5-T2-20-4P385	EKU5-T2-20-4P440
1P+NPE	EKU5-T2-20-1PN150	EKU5-T2-20-1PN275	EKU5-T2-20-1PN320	EKU5-T2-20-1PN385	EKU5-T2-20-1PN440
3P+NPE	EKU5-T2-20-3PN150	EKU5-T2-20-3PN275	EKU5-T2-20-3PN320	EKU5-T2-20-3PN385	EKU5-T2-20-3PN440
With Remote Signaling					
1P	EKU5-T2-20-1P150S	EKU5-T2-20-1P275S	EKU5-T2-20-1P320S	EKU5-T2-20-1P385S	EKU5-T2-20-1P440S
2P	EKU5-T2-20-2P150S	EKU5-T2-20-2P275S	EKU5-T2-20-2P320S	EKU5-T2-20-2P385S	EKU5-T2-20-2P440S
3P	EKU5-T2-20-3P150S	EKU5-T2-20-3P275S	EKU5-T2-20-3P320S	EKU5-T2-20-3P385S	EKU5-T2-20-3P440S
4P	EKU5-T2-20-4P150S	EKU5-T2-20-4P275S	EKU5-T2-20-4P320S	EKU5-T2-20-4P385S	EKU5-T2-20-4P440S
1P+NPE	EKU5-T2-20-1PN150S	EKU5-T2-20-1PN275S	EKU5-T2-20-1PN320S	EKU5-T2-20-1PN385S	EKU5-T2-20-1PN440S
3P+NPE	EKU5-T2-20-3PN150S	EKU5-T2-20-3PN275S	EKU5-T2-20-3PN320S	EKU5-T2-20-3PN385S	EKU5-T2-20-3PN440S

Technical Data

SPD classification according to IEC/EN61643-11		T2	T2	T2	T2	T2
Max. continuous operating a.c.voltage	Uc	150V	275V	320V	385V	440V
Max. continuous operating a.c.voltage	Uc(N-PE)	255V	255V	255V	255V	255V
Norminal discharge current (8/20μs)	In	10kA	10kA	10kA	10kA	10kA
Maximum discharge current (8/20μs)	Imax	20kA	20kA	20kA	20kA	20kA
Voltage protection level	Up	⩽0.8kV	⩽1.0kV	⩽1.2kV	⩽1.45kV	⩽1.6kV
Voltage protection level 5kA	Up	⩽0.5kV	⩽0.8kV	⩽1.0kV	⩽1.2kV	⩽1.4kV
Voltage protection level	Up(N-PE)	⩽1.5kV	⩽1.5kV	⩽1.5kV	⩽1.5kV	⩽1.5kV
Max. backup fuse		125A gL				
Response time	tA	⩽25ns				
Response time	tA(N-PE)	⩽100ns				
Operating temperature range	Tu	-40°C~80°C				
Operating State/Fault Indication		Green/Red				
Cross-section area (Min.)		$4mm^2$				
Cross-section area (Max.)		$35mm^2$				
For mounting on		35mm Din rail				
Enclosure material		Thermal Plastic UL94-V0				
Degree of Protection		IP20				
No. of Poles		1P,2P,3P,4P,1P+NPE,3P+NPE				

Overall and Installation Dimension(mm)



Product Selection Guide

EK U5 - T2 - 40 - 1P - 275 S

- S: With Remote Signaling
- 275: Uc: 150:150V, 275:275V, 320:320V, 385:385V, 440:440V
- 1P: No. of Poles : 1:1P, 2:2P, 3:3P, 4:4P, 1PN:1P+NPE, 3PN:3P+NPE
- 40: I.max: 40kA
- T2: Classification T2
- U5: SPD serie No.5
- EK: Company Code

EKU5-T2-40
2P

EKU5-T2-40
1P+NPE

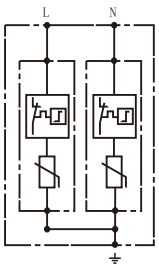
EKU5-T2-40
3P

EKU5-T2-40
4P

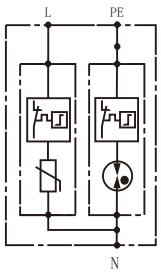
EKU5-T2-40
3P+NPE

Basic Circuit Diagram

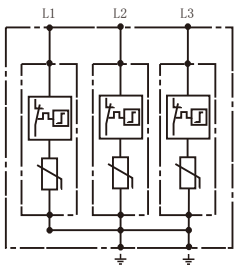
1P



2P



1P+NPE



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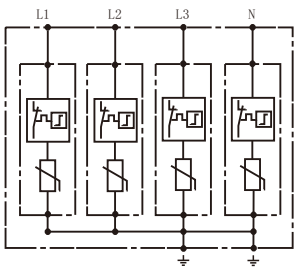
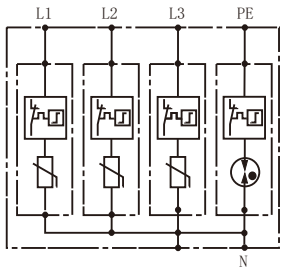


4P



3P+NPE

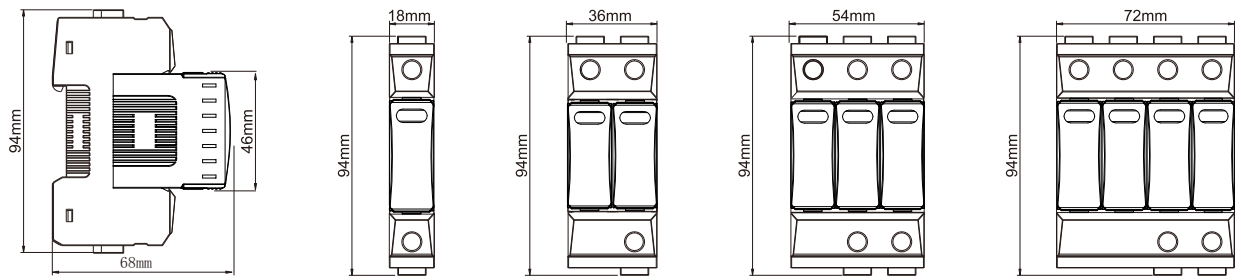
SPD Type Reference List

No. of Poles	Max. Continuous Operating AC Voltage				
	150V	275V	320V	385V	440V
1P	EKU5-T2-40-1P150	EKU5-T2-40-1P275	EKU5-T2-40-1P320	EKU5-T2-40-1P385	EKU5-T2-40-1P440
2P	EKU5-T2-40-2P150	EKU5-T2-40-2P275	EKU5-T2-40-2P320	EKU5-T2-40-2P385	EKU5-T2-40-2P440
3P	EKU5-T2-40-3P150	EKU5-T2-40-3P275	EKU5-T2-40-3P320	EKU5-T2-40-3P385	EKU5-T2-40-3P440
4P	EKU5-T2-40-4P150	EKU5-T2-40-4P275	EKU5-T2-40-4P320	EKU5-T2-40-4P385	EKU5-T2-40-4P440
1P+NPE	EKU5-T2-40-1PN150	EKU5-T2-40-1PN275	EKU5-T2-40-1PN320	EKU5-T2-40-1PN385	EKU5-T2-40-1PN440
3P+NPE	EKU5-T2-40-3PN150	EKU5-T2-40-3PN275	EKU5-T2-40-3PN320	EKU5-T2-40-3PN385	EKU5-T2-40-3PN440
With Remote Signaling					
1P	EKU5-T2-40-1P150S	EKU5-T2-40-1P275S	EKU5-T2-40-1P320S	EKU5-T2-40-1P385S	EKU5-T2-40-1P440S
2P	EKU5-T2-40-2P150S	EKU5-T2-40-2P275S	EKU5-T2-40-2P320S	EKU5-T2-40-2P385S	EKU5-T2-40-2P440S
3P	EKU5-T2-40-3P150S	EKU5-T2-40-3P275S	EKU5-T2-40-3P320S	EKU5-T2-40-3P385S	EKU5-T2-40-3P440S
4P	EKU5-T2-40-4P150S	EKU5-T2-40-4P275S	EKU5-T2-40-4P320S	EKU5-T2-40-4P385S	EKU5-T2-40-4P440S
1P+NPE	EKU5-T2-40-1PN150S	EKU5-T2-40-1PN275S	EKU5-T2-40-1PN320S	EKU5-T2-40-1PN385S	EKU5-T2-40-1PN440S
3P+NPE	EKU5-T2-40-3PN150S	EKU5-T2-40-3PN275S	EKU5-T2-40-3PN320S	EKU5-T2-40-3PN385S	EKU5-T2-40-3PN440S

Technical Data

SPD classification according to IEC/EN61643-11		T2	T2	T2	T2	T2
Max. continuous operating a.c.voltage	Uc	150V	275V	320V	385V	440V
Max. continuous operating a.c.voltage	Uc(N-PE)	255V	255V	255V	255V	255V
Norminal discharge current (8/20μs)	In	20kA	20kA	20kA	20kA	20kA
Maximum discharge current (8/20μs)	Imax	40kA	40kA	40kA	40kA	40kA
Voltage protection level	Up	⩽0.8kV	⩽1.3kV	⩽1.5kV	⩽1.8kV	⩽2.0kV
Voltage protection level5 kA	Up	⩽0.6kV	⩽1.0kV	⩽1.2kV	⩽1.4kV	⩽1.6kV
Voltage protection level	Up(N-PE)	⩽1.5kV	⩽1.5kV	⩽1.5kV	⩽1.5kV	⩽1.5kV
Max. backup fuse		125A gL				
Response time	tA	⩽25ns				
Response time	tA(N-PE)	⩽100ns				
Operating temperature range	Tu	-40°C~80°C				
Operating State/Fault Indication		Green/Red				
Cross-section area (Min.)		4mm^2				
Cross-section area (Max.)		35mm^2				
For mounting on		35mm Din rail				
Enclosure material		Thermal Plastic UL 94-V0				
Degree of Protection		IP20				
No. of Poles		1P,2P,3P,4P,1P+NPE,3P+NPE				

Overall and Installation Dimension(mm)



Product Selection Guide

EK U5 - T2 - 40 PV - 2M - 600 S

- With Remote Signaling
- Uc: 600: DC600V, 1000: DC1000V, 1500: DC1500V
- No. of Module: 2:2Module, 3:3Module
- Solar PV System
- I.max: 40kA
- Classification T2
- SPD serie No.5
- Company Code

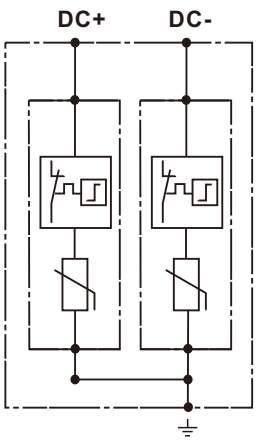
EKU5-T2-40PV
2P(600VDC)

EKU5-T2-40PV
2P(1000VDC)

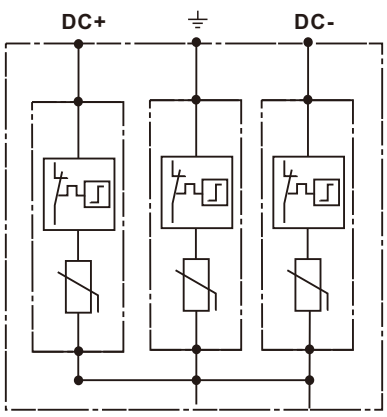
EKU5-T2-40PV
3P(1000VDC)

EKU5-T2-40PV
3P(1500VDC)

Basic Circuit Diagram



2P



3P

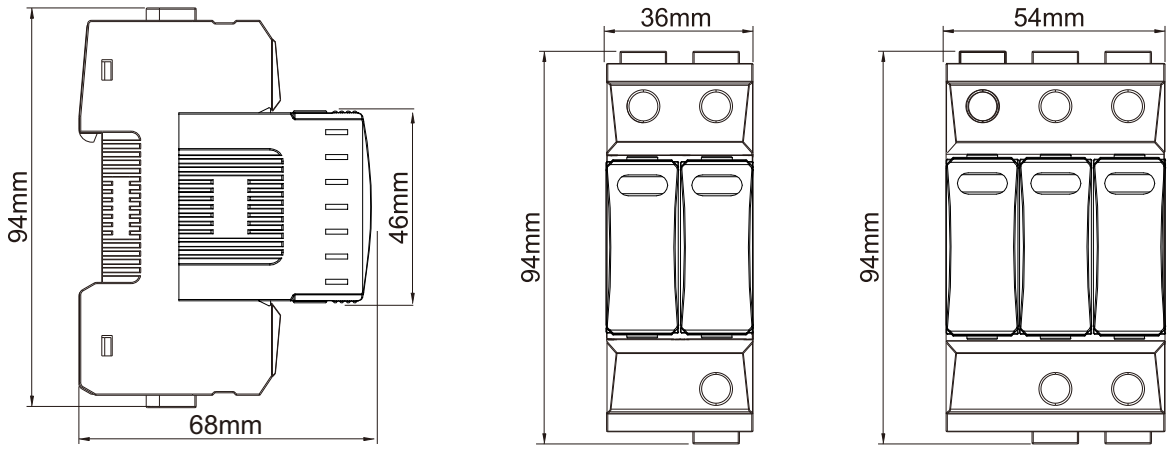
SPD Type Reference List

No. of Poles	Max. Continuous Operating DC Voltage		
	600VDC	1000VDC	1500VDC
2Module	EKU5-T2-40PV-2M600	EKU5-T2-40PV-2M1000	-
3Module	-	EKU5-T2-40PV-3M1000	EKU5-T2-40PV-3M1500
With Remote Signaling			
2Module	EKU5-T2-40PV-2M600S	EKU5-T2-40PV-2M1000S	-
3Module	-	EKU5-T2-40PV-3M1000S	EKU5-T2-40PV-3M1500S

Technical Data

SPD classification according to IEC/EN61643-31			T2	T2	T2
Max. continuous operating a.c.voltage	Ucpv		600VDC	1000VDC	1500VDC
Norminal discharge current (8/20μs)	In		20kA	20kA	20kA
Maximum discharge current (8/20μs)	Imax		40kA	40kA	40kA
Voltage protection level DC+/DV-to PE	Up	2Mods	⩽2.6kV	⩽4.0kV	-
		3Mods	-	⩽4.0kV	⩽5.2kV
Response time	tA		⩽25ns	⩽25ns	⩽25ns
Operating temperature range	Tu		-40℃~80℃		
Operating State/Fault Indication			Green/Red		
Cross-section area (Min.)			4mm^2		
Cross-section area (Max.)			35mm^2		
For mounting on			35mm Din rail		
Enclosure material			Thermal Plastic UL94-V0		
Degree of Protection			IP20		
No. of Moudles			2P(2Mods),3P(3Mods)		

Overall and Installation Dimension(mm)



EKU5-T1+T2-40PV SPD TYPE T1+T2

Standard_ IEC/EN61643-31

EKU5-T1+T2-40PV
3P(1500VDC)

Product Selection Guide

EK U5 -T1+T2 40 PV - 3M - 1500 S

- With Remote Signaling
- Uc: 500: DC500V, 1000: DC1000V, 1500: DC1500V
- No. of Module: 3:3Module
- Solar PV System
- I.max: 40kA
- Classification T1+T2
- SPD serie No.5
- Company Code

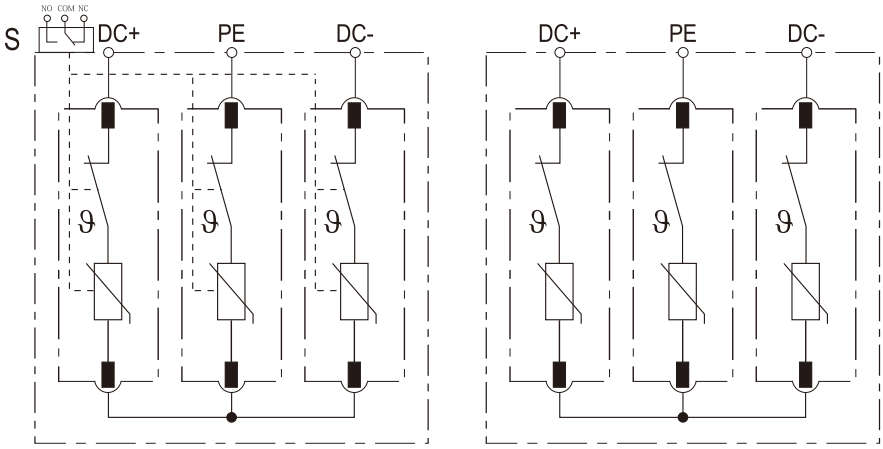
Technical Data

SPD classification according to IEC/EN61643-31		T1+T2		
Max. continuous operating a.c.voltage	Ucpv	500VDC	1000VDC	1500VDC
Impulse Discharge Current (10/350 μs)	Iimp	6.25kA		
Total Discharge Current (10/350 μs)	ITotal	12.5kA		
Norminal discharge current (8/20μs)	In	20kA		
Maximum discharge current (8/20μs)	Imax	40kA		
Voltage protection level DC+/DV-to PE	Up	2000V	4000V	5200V
Response time	tA	⩽25ns		
Operating temperature range	Tu	-40°C~80°C		
Operating State/Fault Indication		Green/Red		
Cross-section area (Min.)		4mm^2		
Cross-section area (Max.)		35mm^2		
For mounting on		35mm Din rail		
Enclosure material		Thermal Plastic UL94-V0		
Degree of Protection		IP20		
No. of Moudles		3P(3Mods)		

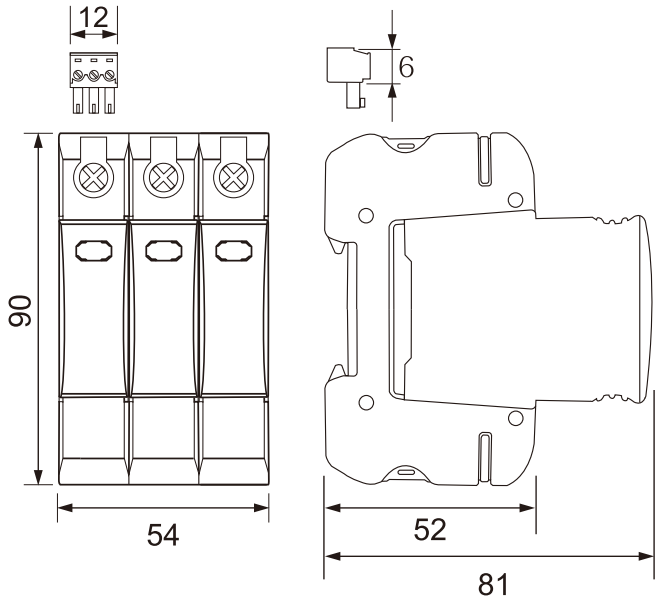
SPD Type Reference List

No. of Poles	Max. Continuous Operating DC Voltage		
	500VDC	1000VDC	1500VDC
3Module	EKU5-T1+T2-40PV-3M500	EKU5-T1+T2-40PV-3M1000	EKU5-T1+T2-40PV-3M1500
With Remote Signaling			
3Module	EKU5-T1+T2-40PV-3M500S	EKU5-T1+T2-40PV-3M1000S	EKU5-T1+T2-40PV-3M1500S

Basic Circuit Diagram



Overall and Installation Dimension(mm)



Product Selection Guide

EK U6 - T2 - 40 - 1P - 275 S

- S: With Remote Signaling
- 275: Uc: 150:150V, 275:275V, 320:320V, 385:385V, 440:440V
- 1P: No. of Poles : 1:1P, 2:2P, 3:3P, 4:4P, 1PN:1P+NPE, 3PN:3P+NPE
- 40: I.max: 40kA
- T2: Classification T2
- U6: SPD serie No.6
- EK: Company Code

EKU6-T2-40
1P

EKU6-T2-40
2P

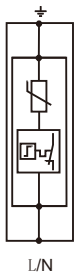
EKU6-T2-40
3P

EKU6-T2-40
4P

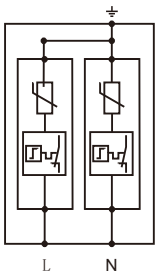
EKU6-T2-40
1P+NPE

EKU6-T2-40
3P+NPE

Basic Circuit Diagram



1P



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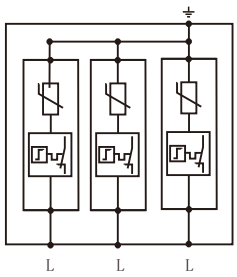
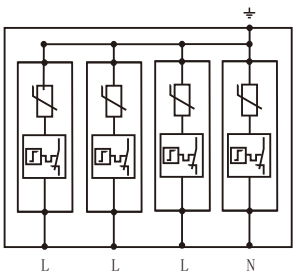
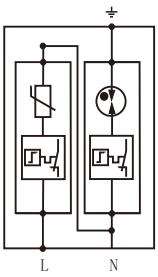


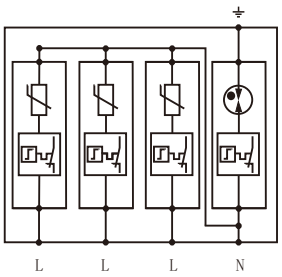
3P



4P



1P+NPE



3P+NPE

EKU6-T2-40 SPD TYPE T2

Standard_ IEC/EN61643-11

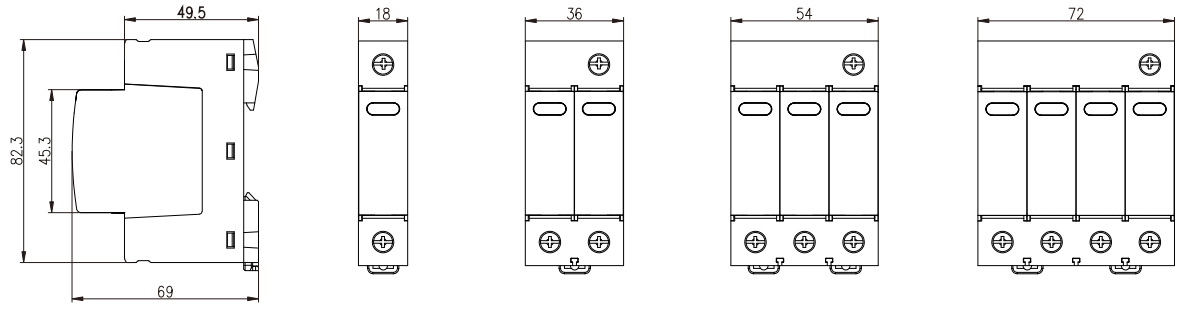
SPD Type Reference List

No. of Poles	Max. Continuous Operating AC Voltage				
	150V	275V	320V	385V	440V
1P	EKU6-T2-40-1P150	EKU6-T2-40-1P275	EKU6-T2-40-1P320	EKU6-T2-40-1P385	EKU6-T2-40-1P440
2P	EKU6-T2-40-2P150	EKU6-T2-40-2P275	EKU6-T2-40-2P320	EKU6-T2-40-2P385	EKU6-T2-40-2P440
3P	EKU6-T2-40-3P150	EKU6-T2-40-3P275	EKU6-T2-40-3P320	EKU6-T2-40-3P385	EKU6-T2-40-3P440
4P	EKU6-T2-40-4P150	EKU6-T2-40-4P275	EKU6-T2-40-4P320	EKU6-T2-40-4P385	EKU6-T2-40-4P440
1P+NPE	EKU6-T2-40-1PN150	EKU6-T2-40-1PN275	EKU6-T2-40-1PN320	EKU6-T2-40-1PN385	EKU6-T2-40-1PN440
3P+NPE	EKU6-T2-40-3PN150	EKU6-T2-40-3PN275	EKU6-T2-40-3PN320	EKU6-T2-40-3PN385	EKU6-T2-40-3PN440
With Remote Signaling					
1P	EKU6-T2-40-1P150S	EKU6-T2-40-1P275S	EKU6-T2-40-1P320S	EKU6-T2-40-1P385S	EKU6-T2-40-1P440S
2P	EKU6-T2-40-2P150S	EKU6-T2-40-2P275S	EKU6-T2-40-2P320S	EKU6-T2-40-2P385S	EKU6-T2-40-2P440S
3P	EKU6-T2-40-3P150S	EKU6-T2-40-3P275S	EKU6-T2-40-3P320S	EKU6-T2-40-3P385S	EKU6-T2-40-3P440S
4P	EKU6-T2-40-4P150S	EKU6-T2-40-4P275S	EKU6-T2-40-4P320S	EKU6-T2-40-4P385S	EKU6-T2-40-4P440S
1P+NPE	EKU6-T2-40-1PN150S	EKU6-T2-40-1PN275S	EKU6-T2-40-1PN320S	EKU6-T2-40-1PN385S	EKU6-T2-40-1PN440S
3P+NPE	EKU6-T2-40-3PN150S	EKU6-T2-40-3PN275S	EKU6-T2-40-3PN320S	EKU6-T2-40-3PN385S	EKU6-T2-40-3PN440S

Technical Data

SPD classification according to IEC/EN61643-11		T2	T2	T2	T2	T2
Max. continuous operating a.c.voltage	Uc	150V	275V	320V	385V	440V
Max. continuous operating a.c.voltage	Uc(N-PE)	255V	255V	255V	255V	255V
Norminal discharge current (8/20μs)	In	20kA	20kA	20kA	20kA	20kA
Maximum discharge current (8/20μs)	Imax	40kA	40kA	40kA	40kA	40kA
Voltage protection level	Up	⩽0.8kV	⩽1.3kV	⩽1.5kV	⩽1.8kV	⩽2.0kV
Voltage protection level5 kA	Up	⩽0.6kV	⩽1.0kV	⩽1.2kV	⩽1.4kV	⩽1.6kV
Voltage protection level	Up(N-PE)	⩽1.5kV	⩽1.5kV	⩽1.5kV	⩽1.5kV	⩽1.5kV
Max. backup fuse		125A gL				
Response time	tA	⩽25ns				
Response time	tA(N-PE)	⩽100ns				
Operating temperature range	Tu	-40°C~80°C				
Operating State/Fault Indication		Green/Red				
Cross-section area (Min.)		$4mm^2$				
Cross-section area (Max.)		$35mm^2$				
For mounting on		35mm Din rail				
Enclosure material		Thermal Plastic UL 94-V0				
Degree of Protection		IP20				
No. of Poles		1P,2P,3P,4P,1P+NPE,3P+NPE				

Overall and Installation Dimension(mm)



EKU6-T2-40S1/2 SPD Type T2

Standard_ IEC/EN61643-11

EKU6-T2-40S1　　EKU6-T2-40S2

Product Selection Guide

EK U6 - T2 - 40S 1 - 1PN - 275 S

- S: With Remote Signaling
- 275: Uc: 275V
- 1PN: No. of Poles: 1PN:1+NPE, 2P: 2P
- 1: design 1：(Orange) design 2：(Grey)
- 40S: Imax: 40kA, Small size
- T2: Classification T2
- U6: SPD serie No.6
- EK: Company Code

SPD Type Reference List

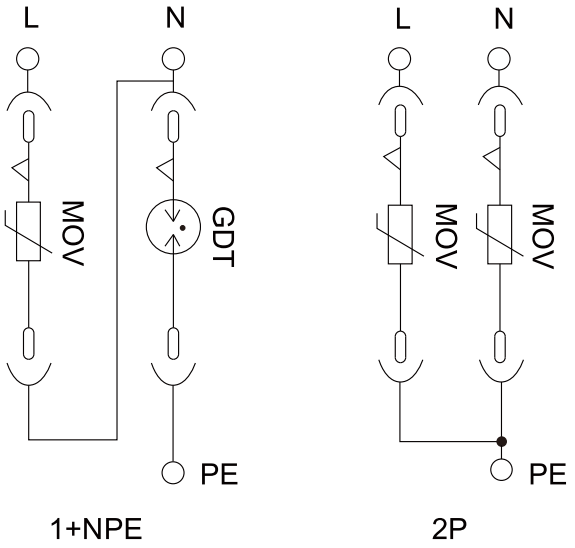
No. of Poles	Max. Continuous Operating AC Voltage 275V
1+NPE	EKU6-T2-40S1-1PN275
2P	EKU6-T2-40S1-2P275
With Remote Signaling	
1+NPE	EKU6-T2-40S1-1PN275S
2P	EKU6-T2-40S1-2P275S

No. of Poles	Max. Continuous Operating AC Voltage 275V
1+NPE	EKU6-T2-40S2-1PN275
2P	EKU6-T2-40S2-2P275
With Remote Signaling	
1+NPE	EKU6-T2-40S2-1PN275S
2P	EKU6-T2-40S2-2P275S

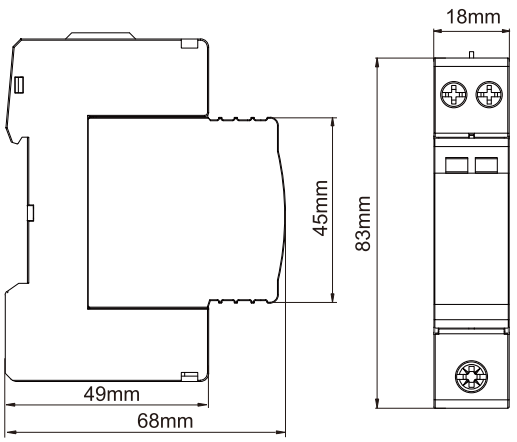
Technical Data

SPD classification according to IEC/EN61643-11		T2	T2
Model		EKU6-T2-40S1（Orange）	EKU6-T2-40S2（Grey）
Max. continuous operating a.c.voltage	Uc(L-N)	275V	275V
Max. continuous operating a.c.voltage	Uc(N-PE)	255V	255V
Norminal discharge current (8/20μs)	In	20kA	20kA
Maximum discharge current (8/20μs)	Imax	40kA	40kA
Voltage protection level	Up(L-N)	⩽1.5kV	⩽1.5kV
Voltage protection level 5kA	Up	⩽1.0kV	⩽1.0kV
Voltage protection level	Up(N-PE)	⩽1.5kV	⩽1.5kV
Max. backup fuse		125A gL	125A gL
Response time	tA(L-N)	⩽25ns	⩽25ns
Response time	tA(N-PE)	⩽100ns	⩽100ns
Operating temperature range	Tu	-40°C~80°C	-40°C~80°C
Operating State/Fault Indication		Green/Red	Green/Red
Cross-section area (Min.)		4mm²	4mm²
Cross-section area (Max.)		1+NPE: L、N:10mm², PE:16mm²	1+NPE: L、N:10mm² , PE:16mm²
For mounting on		35mm Din rail	35mm Din rail
Enclosure material		Thermal Plastic UL94-V0	Thermal Plastic UL94-V0
Degree of Protection		IP20	IP20
No. of Poles		1+NPE, 2P	1+NPE, 2P

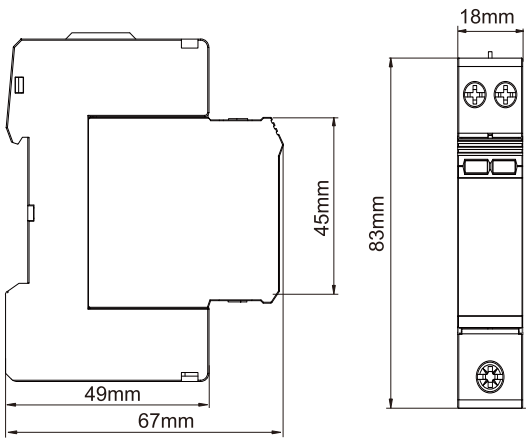
Schematic Diagram



Overall and Installation Dimension(mm)



EKU6-T2-40S1



EKU6-T2-40S2

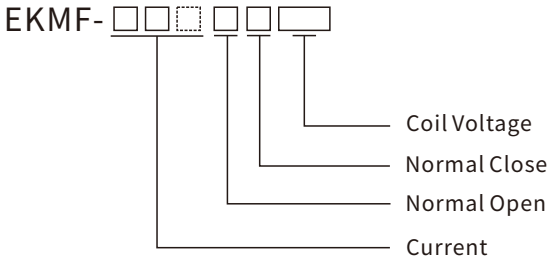
Other Moudular Devices

Applicable Scope

The EKMF modular contactor (hereinafter referred to as contactor) is mainly suitable for AC 50Hz (or 60Hz), rated working voltage to 400V and rated current operation in the circuit up to 125A, it can control the low-inductance and low-inductance load of household appliances and similar purposes; it can also be used to control the load of household motors. The power should be reduced accordingly.

The EKMF contactors according to standard IEC/EN61095, IEC60947-4-1 and are used mainly in buildings for switching and controlling lighting, heating, ventilation and pumps. They are part of the complete range of Din rail products and can be integrated easily in dedicated panels.

Modular Contactor



(eg. EKMF-2520-230. It is 25A, 2NO, 230VAC current coil voltage)

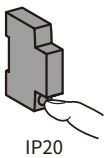
Main Technical Data

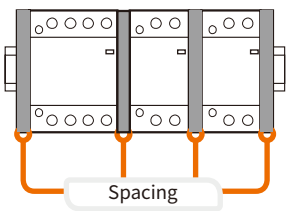
Rated voltage (Ue)	1P, 2P	250VAC
	3P, 4P	400VAC
Frequency		50/60Hz
Mechanical life		1,000,000 cycles
Electrical life		100,000 cycles
Maximum number of switching operation a day		100
Insulation voltage (Ui)		500V AC
Pollution degree		2
Rated impulse withstand voltage (Uimp)		2.5kV (4kV for 12/24/48VAC)
Degree of protection (IEC 60529)		IP20
Operating temperature		-5°C~+60°C (1)
Storage temperature		-40°C~+70°C
Tropicalization (IEC 60068.1)		Treatment 2 (relative humidity 95% at 55°C)
ELSV compliance (Extra Low Safety Voltage) for 12/24/48VAC versions		
The product control conforms to the SELV (safety extra low voltage) requirements		

(1)In the case of contactor mounting in a enclosure for which the interior temperature is in range detween 50 °C and 60 °C, it is necessary to use a spacer, between each contactor

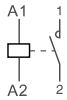
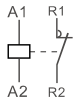
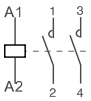
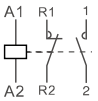
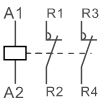
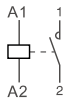
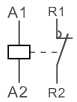
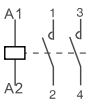
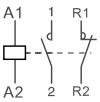
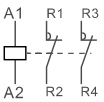
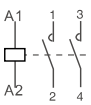
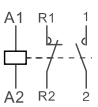
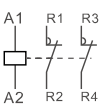
Clip on DIN rail 35 mm


±30° vertical.

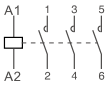
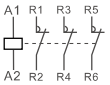
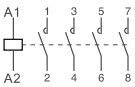
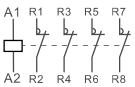
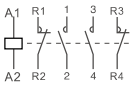
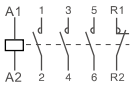
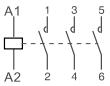
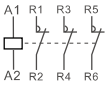
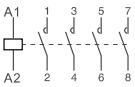
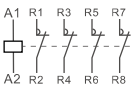
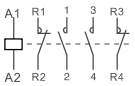
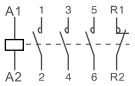
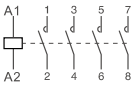
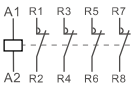
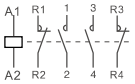
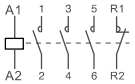

IP20



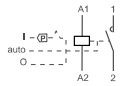
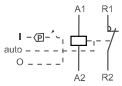
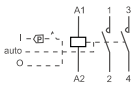
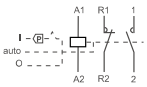
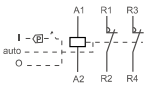
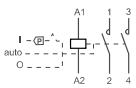
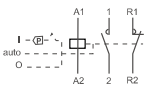
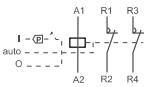
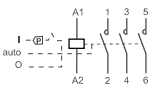
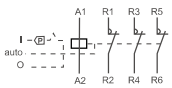
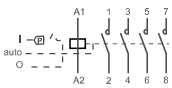
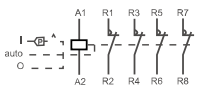
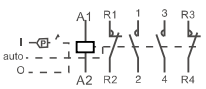
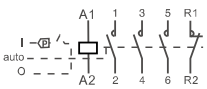
Automatic Type Product Selection Form

Modules	Poles	Contactor Model	Rated Current		Coil voltage VAC	Circuit Diagram
			AC-1, AC-7a	AC-3, AC-7b		
 1 Modules	1P	EKMF-1610	16A	6A	24 110 230	 1NO
		EKMF-2010	20A	7A		
		EKMF-2510	25A	9A		
		EKMF-1601	16A	6A		 1NC
		EKMF-2001	20A	7A		
		EKMF-2501	25A	9A		
	2P	EKMF-1620	16A	6A		 2NO
		EKMF-2020	20A	7A		
		EKMF-2520	25A	9A		
		EKMF-1611	16A	6A		 1NO+1NC
		EKMF-2011	20A	7A		
		EKMF-2511	25A	9A		
		EKMF-1602	16A	6A		 2NC
		EKMF-2002	20A	7A		
		EKMF-2502	25A	9A		
 2 Modules	1P	EKMF-3210	32A	12A	24 110 230	 1NO
		EKMF-4010	40A	18A		
		EKMF-6310	63A	25A		
		EKMF-3201	32A	12A		 1NC
		EKMF-4001	40A	18A		
		EKMF-6301	63A	25A		
	2P	EKMF-3220	32A	12A		 2NO
		EKMF-4020	40A	18A		
		EKMF-6320	63A	25A		
		EKMF-3211	32A	12A		 1NO+1NC
		EKMF-4011	40A	18A		
		EKMF-6311	63A	25A		
		EKMF-3202	32A	12A		 2NC
		EKMF-4002	40A	18A		
		EKMF-6302	63A	25A		
 3 Modules	2P	EKMF-8020	80A	32A	24 110 230	 2NO
		EKMF-10020	100A	40A		
		EKMF-12520	125A	50A		
		EKMF-8011	80A	32A		 1NO+1NC
		EKMF-10011	100A	40A		
		EKMF-12511	125A	50A		
		EKMF-8002	80A	32A		 2NC
		EKMF-10002	100A	40A		
		EKMF-12502	125A	50A		

Standard_ IEC/EN61095
IEC60947-4-1

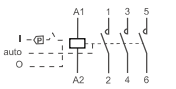
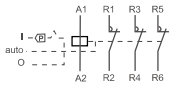
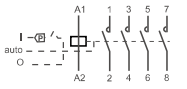
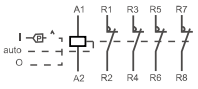
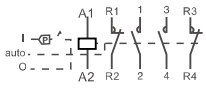
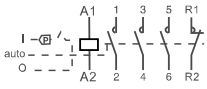
Modules	Poles	Contactor Model	Rated Current		Coil voltage VAC	Circuit Diagram
			AC-1, AC-7a	AC-3, AC-7b		
 2 Modules	3P	EKMF-1630	16A	6A	24 110 230 380	 3NO
		EKMF-2030	20A	7A		
		EKMF-2530	25A	9A		
		EKMF-1603	16A	6A		 3NC
		EKMF-2003	20A	7A		
		EKMF-2503	25A	9A		
	4P	EKMF-1640	16A	6A		 4NO
		EKMF-2040	20A	7A		
		EKMF-2540	25A	9A		
		EKMF-1604	16A	6A		 4NC
		EKMF-2004	20A	7A		
		EKMF-2504	25A	9A		
		EKMF-1622	16A	6A		 2NO+2NC
		EKMF-2022	20A	7A		
		EKMF-2522	25A	9A		
		EKMF-1631	16A	6A		 3NO+1NC
		EKMF-2031	20A	7A		
		EKMF-2531	25A	9A		
 3 Modules	3P	EKMF-3230	32A	12A	24 110 230 380	 3NO
		EKMF-4030	40A	18A		
		EKMF-6330	63A	25A		
		EKMF-3203	32A	12A		 3NC
		EKMF-4003	40A	18A		
		EKMF-6303	63A	25A		
	4P	EKMF-3240	32A	12A		 4NO
		EKMF-4040	40A	18A		
		EKMF-6340	63A	25A		
		EKMF-3204	32A	12A		 4NC
		EKMF-4004	40A	18A		
		EKMF-6304	63A	25A		
		EKMF-3222	32A	12A		 2NO+2NC
		EKMF-4022	40A	18A		
		EKMF-6322	63A	25A		
		EKMF-3231	32A	12A		 3NO+1NC
		EKMF-4031	40A	18A		
		EKMF-6331	63A	25A		
 6 Modules	4P	EKMF-8040	80A	32A	24 110 230 380	 4NO
		EKMF-10040	100A	40A		
		EKMF-12540	125A	50A		
		EKMF-8004	80A	32A		 4NC
		EKMF-10004	100A	40A		
		EKMF-12504	125A	50A		
		EKMF-8022	80A	32A		 2NO+2NC
		EKMF-10022	100A	40A		
		EKMF-12522	125A	50A		
		EKMF-8031	80A	32A		 3NO+1NC
		EKMF-10031	100A	40A		
		EKMF-12531	125A	50A		

Manual Type Product Selection Form

Modules	Poles	Contactor Model	Rated Current		Coil voltage VAC	Circuit Diagram
			AC-1, AC-7a	AC-3, AC-7b		
 1 Modules	1P	EKMF-1610M	16A	6A	24 110 230	 1NO
		EKMF-2010M	20A	7A		
		EKMF-2510M	25A	9A		
		EKMF-1601M	16A	6A		 1NC
		EKMF-2001M	20A	7A		
		EKMF-2501M	25A	9A		
	2P	EKMF-1620M	16A	6A		 2NO
		EKMF-2020M	20A	7A		
		EKMF-2520M	25A	9A		
		EKMF-1611M	16A	6A		 1NO+1NC
		EKMF-2011M	20A	7A		
		EKMF-2511M	25A	9A		
		EKMF-1602M	16A	6A		 2NC
		EKMF-2002M	20A	7A		
		EKMF-2502M	25A	9A		
 2 Modules	2P	EKMF-3220M	32A	12A	24 110 230	 2NO
		EKMF-4020M	40A	18A		
		EKMF-6320M	63A	25A		
		EKMF-3211M	32A	12A		 1NO+1NC
		EKMF-4011M	40A	18A		
		EKMF-6311M	63A	25A		
		EKMF-3202M	32A	12A		 2NC
		EKMF-4002M	40A	18A		
		EKMF-6302M	63A	25A		
 2 Modules	3P	EKMF-1630M	16A	6A	24 110 230 380	 3NO
		EKMF-2030M	20A	7A		
		EKMF-2530M	25A	9A		
		EKMF-1603M	16A	6A		 3NC
		EKMF-2003M	20A	7A		
		EKMF-2503M	25A	9A		
	4P	EKMF-1640M	16A	6A		 4NO
		EKMF-2040M	20A	7A		
		EKMF-2540M	25A	9A		
		EKMF-1604M	16A	6A		 4NC
		EKMF-2004M	20A	7A		
		EKMF-2504M	25A	9A		
		EKMF-1622M	16A	6A		 2NO+2NC
		EKMF-2022M	20A	7A		
		EKMF-2522M	25A	9A		
		EKMF-1631M	16A	6A		 3NO+1NC
		EKMF-2031M	20A	7A		
		EKMF-2531M	25A	9A		

Modular Contactor

Standard_ IEC/EN61095
IEC60947-4-1

Modules	Poles	Contactor Model	Rated Current		Coil voltage VAC	Circuit Diagram
			AC-1, AC-7a	AC-3, AC-7b		
 3 Modules	3P	EKMF-3230M	32A	12A	24 110 230 380	 3NO
		EKMF-4030M	40A	18A		
		EKMF-6330M	63A	25A		
		EKMF-3203M	32A	12A		 3NC
		EKMF-4003M	40A	18A		
		EKMF-6303M	63A	25A		
	4P	EKMF-3240M	32A	12A		 4NO
		EKMF-4040M	40A	18A		
		EKMF-6340M	63A	25A		
		EKMF-3204M	32A	12A		 4NC
		EKMF-4004M	40A	18A		
		EKMF-6304M	63A	25A		
		EKMF-3222M	32A	12A		 2NO+2NC
		EKMF-4022M	40A	18A		
		EKMF-6322M	63A	25A		
		EKMF-3231M	32A	12A		 3NO+1NC
		EKMF-4031M	40A	18A		
		EKMF-6331M	63A	25A		

Modular Contactor Auxiliary

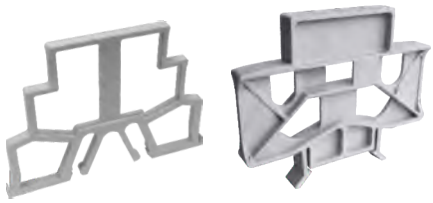
Auxiliary Contacts

The Auxiliary contacts are indicator contactor contacts status switch OFF or ON

	AC-12		AC-15		DC-13		Rated Current	Circuit Diagram
	C.V.	C.A.	C.V.	C.A.	C.V.	C.A.		
EKMF-OF-11	240V	5A	230V	2A	DC 130V	1A	5A	
EKMF-OF-20	240V	5A	230V	2A	DC 130V	1A	5A	

Spacing Piece

Spacers are used to reduce the temperature rise of devices mounted side by side. It is recommended to separate electronic equipment (temperature adjustment devices, programmable timer etc.) from electromechanical equipment (impulse relays, contactors)



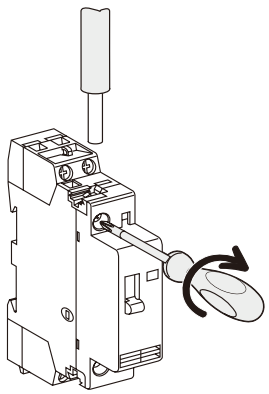
	Technical specifications
Spacing piece	3mm Spacing piece
	9mm Spacing piece

Consumption

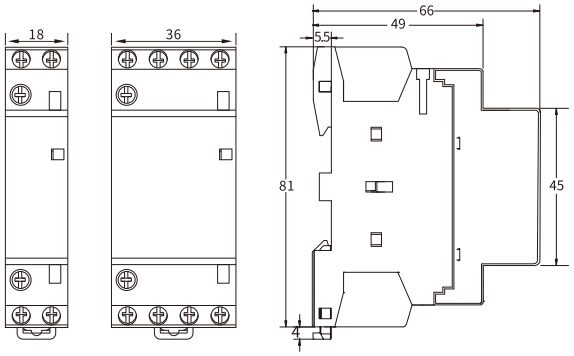
Poles	Rated Current		Control voltage (VAC)	Power consumption		Max. power
	AC-7a	AC-7b		Holding	Inrush	
1P	16A	6A	230	2.8VA	11.5VA	1.2W
	20A	7A	230	2.8VA	11.5VA	1.2W
	25A	9A	230	2.8VA	11.5VA	1.2W
2P	16A	6A	230	2.8VA	11.5VA	1.2W
	20A	7A	230	2.8VA	11.5VA	1.2W
	25A	9A	230	2.8VA	11.5VA	1.2W
	32A	12A	230	4.1VA	31VA	1.6W
	40A	18A	230	4.1VA	31VA	1.6W
	63A	25A	230	4.1VA	31VA	1.6W
	100A	-	230	4.1VA	31VA	2.1W
3P	16A	6A	230	4.1VA	31VA	1.6W
	20A	7A	230	4.1VA	31VA	1.6W
	25A	9A	230	4.1VA	31VA	1.6W
	32A	12A	230	7VA	48VA	2.1W
	40A	18A	230	7VA	48VA	2.1W
	63A	25A	230	7VA	48VA	2.1W
4P	16A	6A	230	4.1VA	31VA	1.6W
	20A	7A	230	4.1VA	31VA	1.6W
	25A	9A	230	4.1VA	31VA	1.6W
	32A	12A	230	7VA	48VA	2.1W
	40A	18A	230	7VA	48VA	2.1W
	63A	25A	230	7VA	48VA	2.1W
	100A	-	230	13VA	106VA	4.2W

Connection Parameter

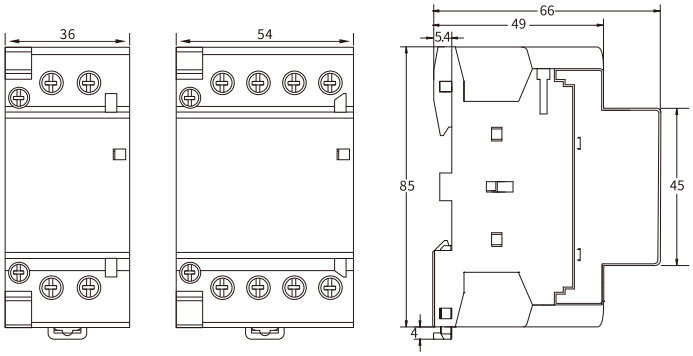
Type		Rated Current	Lenght tripping	Circuit	Tightening torque	Copper cables	
						Rigid	Flexible or Ferrule
							
EKMF	PZ1: 4mm	16-100A	9mm	Control	0.8N.m	1.5~2.5mm² 2x1.5mm²	1.5~2.5mm² 2x2.5mm²
		16-25A	9mm	Power	0.8N.m	1.5~6mm²	1~4mm²
	PZ2: 6mm	40-63A	14mm	Power	3.5N.m	6~25mm²	6~16mm²
		100A	14mm	Power	3.5N.m	6x3.5mm²	6~35mm²



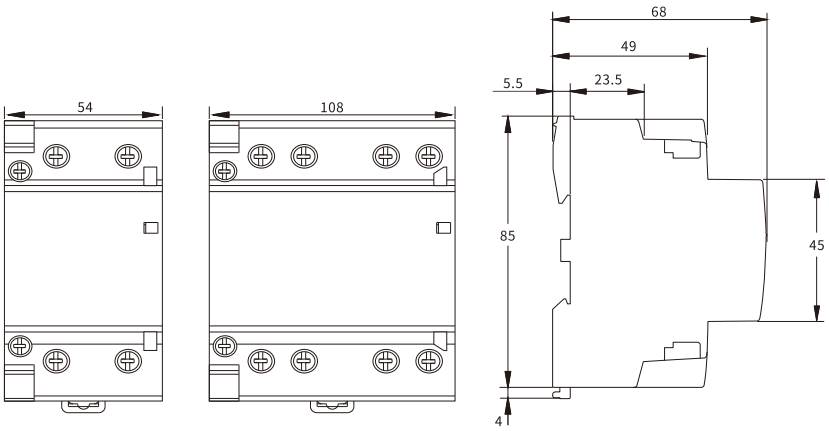
Overall and Installation Dimension(mm)



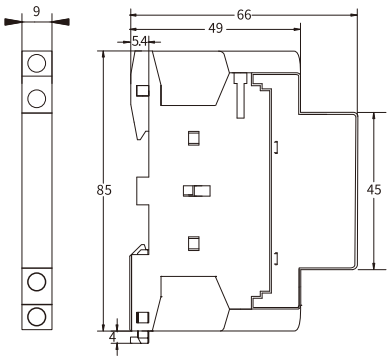
EKMF-16/20/25A



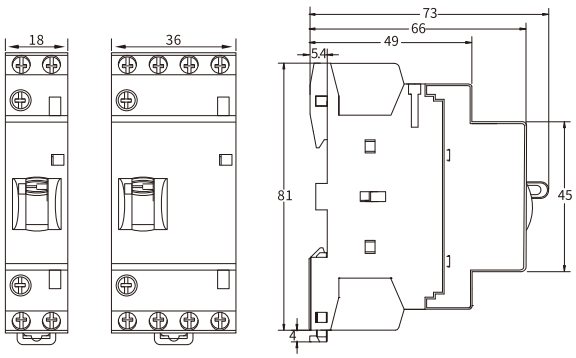
EKMF-32/40/63A



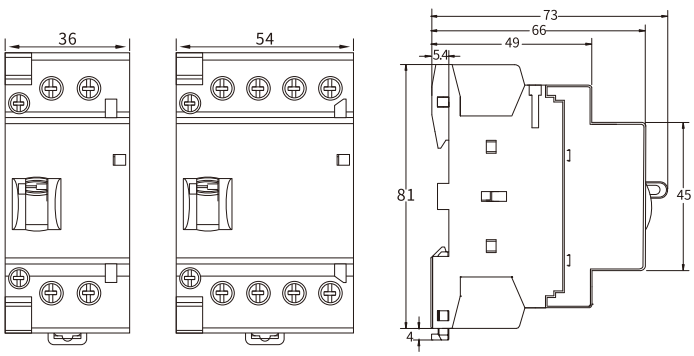
EKMF-80/100/125A



EKMF-OF



EKMF manual control contactor 16/25A



EKMF manual control contactor 40/63A

Applicable Scope

The EKMF7 modular contactor (hereinafter referred to as contactor) is mainly suitable for AC 50Hz (or 60Hz), rated working voltage to 400V and rated current operation in the circuit up to 63A, it can control the low-inductance and low-inductance load of household appliances and similar purposes; it can also be used to control the load of household motors. The power should be reduced accordingly.

The EKMF7 contactors according to standard IEC/EN61095, IEC60947-4-1 and are used mainly in buildings for switching and controlling lighting, heating, ventilation and pumps. They are part of the complete range of Din rail products and can be integrated easily in dedicated panels.

Modular Contactor

EKMF7-□ □ □□ □□□

- Coil Voltage
- Normal Close
- Normal Open
- Current

(eg. EKMF7-2520-24V AC/DC . It is 25A, 2NO, 24V AC/DC current coil voltage)

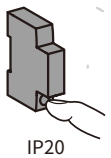
Main Technical Data

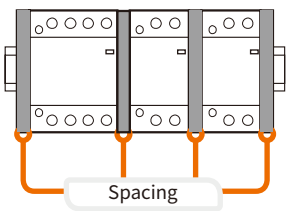
Rated voltage (Ue)	1P, 2P	250VAC
	3P, 4P	400VAC
Frequency		50/60Hz
Mechanical life		1,000,000 cycles
Electrical life		100,000 cycles
Maximum number of switching operation a day		100
Insulation voltage (Ui)		500V AC
Pollution degree		2
Rated impulse withstand voltage (Uimp)		2.5kV (4kV for 12/24/48VAC)
Degree of protection (IEC 60529)		IP20
Operating temperature		-5°C~+60°C
Storage temperature		-40°C~+70°C
Tropicalization (IEC 60068.1)		Treatment 2 (relative humidity 95% at 55°C)
ELSV compliance (Extra Low Safety Voltage) for 12/24/48VAC versions		
The product control conforms to the SELV (safety extra low voltage) requirements		

(1)In the case of contactor mounting in a enclosure for which the interior temperature is in range detween 50 °C and 60 °C, it is necessary to use a spacer, between each contactor

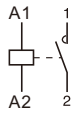
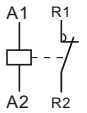
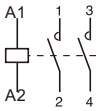
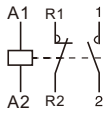
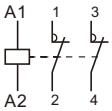
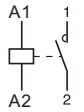
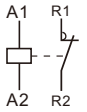
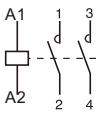
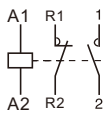
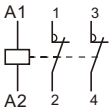
Clip on DIN rail 35 mm


±30° vertical.


IP20

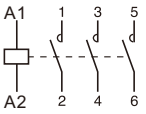
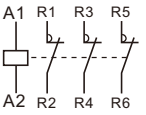
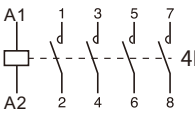
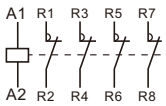
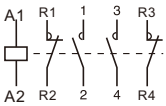
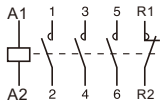
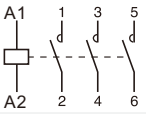
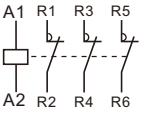
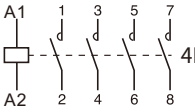
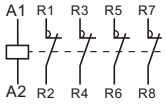
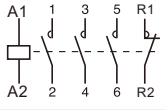


Product Selection Form

Modules	Poles	Contactor Model	Rated Current		Coil voltage	Circuit Diagram
			AC-1, AC-7a	AC-3, AC-7b		
 1 Modules	1P	EKMF7-1610	16A	6A	12V AC/DC 24V AC/DC 48V AC/DC 110V AC/DC 230V AC/DC	 1NO
		EKMF7-2010	20A	7A		
		EKMF7-2510	25A	9A		
		EKMF7-3210	32A	12A		
		EKMF7-1601	16A	6A		 1NC
		EKMF7-2001	20A	7A		
		EKMF7-2501	25A	9A		
		EKMF7-3201	32A	12A		
	2P	EKMF7-1620	16A	6A		 2NO
		EKMF7-2020	20A	7A		
		EKMF7-2520	25A	9A		
		EKMF7-3220	32A	12A		
		EKMF7-1611	16A	6A		 1NO+1NC
		EKMF7-2011	20A	7A		
		EKMF7-2511	25A	9A		
		EKMF7-3211	32A	12A		
		EKMF7-1602	16A	6A		 2NC
		EKMF7-2002	20A	7A		
		EKMF7-2502	25A	9A		
		EKMF7-3202	32A	12A		
 2 Modules	1P	EKMF7-4010	40A	18A	12V AC/DC 24V AC/DC 48V AC/DC 110V AC/DC 230V AC/DC	 1NO
		EKMF7-6310	63A	25A		
		EKMF7-4001	40A	18A		 1NC
		EKMF7-6301	63A	25A		
	2P	EKMF7-4020	40A	18A		 2NO
		EKMF7-6320	63A	25A		
		EKMF7-4011	40A	18A		 1NO+1NC
		EKMF7-6311	63A	25A		
		EKMF7-4002	40A	18A		 2NC
		EKMF7-6302	63A	25A		

AC/DC Modular Contactor

Standard_ IEC/EN61095
IEC60947-4-1

Modules	Poles	Contactor Model	Rated Current		Coil voltage	Circuit Diagram
			AC-1, AC-7a	AC-3, AC-7b		
 2 Modules	3P	EKMF7-1630	16A	6A	12V AC/DC 24V AC/DC 48V AC/DC 110V AC/DC 230V AC/DC	 3NO
		EKMF7-2030	20A	7A		
		EKMF7-2530	25A	9A		
		EKMF7-3230	32A	12A		
		EKMF7-1603	16A	6A		 3NC
		EKMF7-2003	20A	7A		
		EKMF7-2503	25A	9A		
		EKMF7-3203	32A	12A		
	4P	EKMF7-1640	16A	6A		 4NO
		EKMF7-2040	20A	7A		
		EKMF7-2540	25A	9A		
		EKMF7-3240	32A	12A		
		EKMF7-1604	16A	6A		 4NC
		EKMF7-2004	20A	7A		
		EKMF7-2504	25A	9A		
		EKMF7-3204	32A	12A		
		EKMF7-1622	16A	6A		 2NO+2NC
		EKMF7-2022	20A	7A		
		EKMF7-2522	25A	9A		
		EKMF7-3222	32A	12A		
		EKMF7-1631	16A	6A		 3NO+1NC
		EKMF7-2031	20A	7A		
		EKMF7-2531	25A	9A		
		EKMF7-3231	32A	12A		
 3 Modules	3P	EKMF7-4030	40A	18A	12V AC/DC 24V AC/DC 48V AC/DC 110V AC/DC 230V AC/DC	 3NO
		EKMF7-6330	63A	25A		
		EKMF7-4003	40A	18A		 3NC
		EKMF7-6303	63A	25A		
	4P	EKMF7-4040	40A	18A		 4NO
		EKMF7-6340	63A	25A		
		EKMF7-4004	40A	18A		 4NC
		EKMF7-6304	63A	25A		
		EKMF7-4022	40A	18A		 2NO+2NC
		EKMF7-6322	63A	25A		
		EKMF7-4031	40A	18A		 3NO+1NC
		EKMF7-6331	63A	25A		

Modular Contactor Power Consumption

Poles	Rated Current		Control voltage (VAC)	Power consumption		Max Power
	AC-7a	AC-7b		Hold on	Pull in	
2P	16A	6A	230	2.1VA	2.1VA	2.0W
	20A	7A	230	2.1VA	2.1VA	2.0W
	25A	9A	230	2.1VA	2.1VA	2.0W
	32A	12A	230	2.1VA	2.1VA	2.0W
	40A	18A	230	2.3VA	2.3VA	2.0W
	63A	25A	230	2.3VA	2.3VA	2.0W
4P	16A	6A	230	2.3VA	2.3VA	2.0W
	20A	7A	230	2.3VA	2.3VA	2.0W
	25A	9A	230	2.3VA	2.3VA	2.0W
	32A	12A	230	2.3VA	2.3VA	2.0W
	40A	18A	230	6.0VA	6.0VA	5.5W
	63A	25A	230	6.0VA	6.0VA	5.5W

Modular Contactor Auxiliary

Auxiliary Contacts

The Auxiliary contacts are indicator contactor contacts status switch OFF or ON

	AC-12		AC-15		DC-13		Rated Current	Circuit Diagram
	C.V.	C.A.	C.V.	C.A.	C.V.	C.A.		
EKMF-OF-11	240V	5A	230V	2A	DC 130V	1A	5A	
EKMF-OF-20	240V	5A	230V	2A	DC 130V	1A	5A	

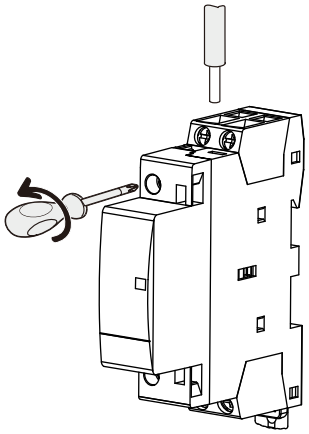
Spacing Piece

Spacers are used to reduce the temperature rise of devices mounted side by side. It is recommended to separate electronic equipment (temperature adjustment devices, programmable timer etc.) from electromechanical equipment (impulse relays, contactors)

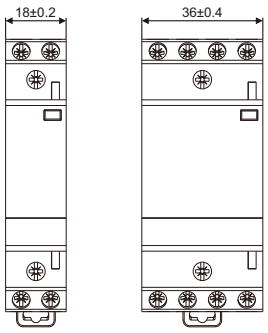
	Technical specifications
Spacing piece	3mm Spacing piece
	9mm Spacing piece

Connection Parameter

Type		Rated Current	Lenght tripping	Circuit	Tightening torque	Copper cables	
						Rigid	Flexible or Ferrule
							
EKMF7	PZ1: 4mm	16-63A	9mm	Control	0.8N.m	1.5~2.5mm² 2x1.5mm²	1.5~2.5mm² 2x2.5mm²
		16-32A	9mm	Power	0.8N.m	1.5~6mm²	1~4mm²
	PZ2: 6mm	40-63A	14mm	Power	3.5N.m	6~25mm²	6~16mm²
EKMF-OF	PZ1: 4mm	-	9mm	-	0.8N.m	1.5~2.5mm² 2x1.5mm²	1.5~2.5mm² 2x2.5mm²

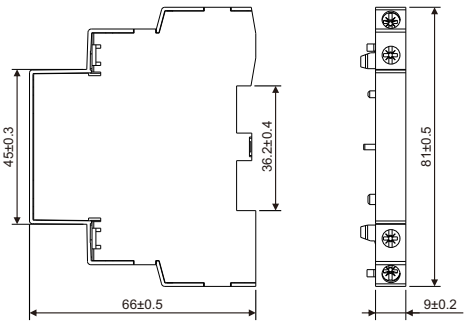


Overall and Installation Dimension(mm)

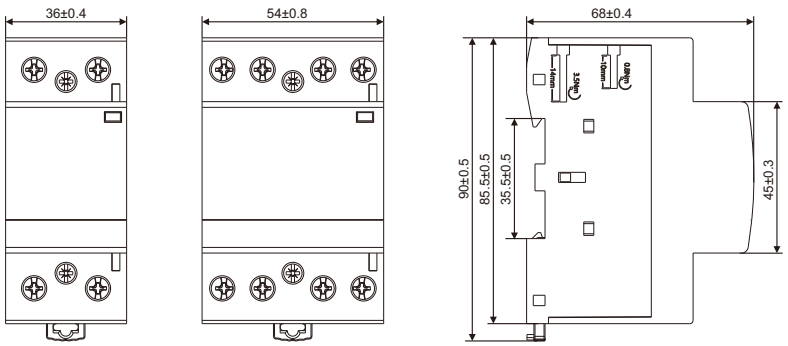


1P/2P 3P/4P

EKMF7-16/20/25/32



EKMF-OF



1P/2P 3P/4P

EKMF7-40/63

EKMV

Modular Voltage Meter ---------- Standard_ IEC60051-1

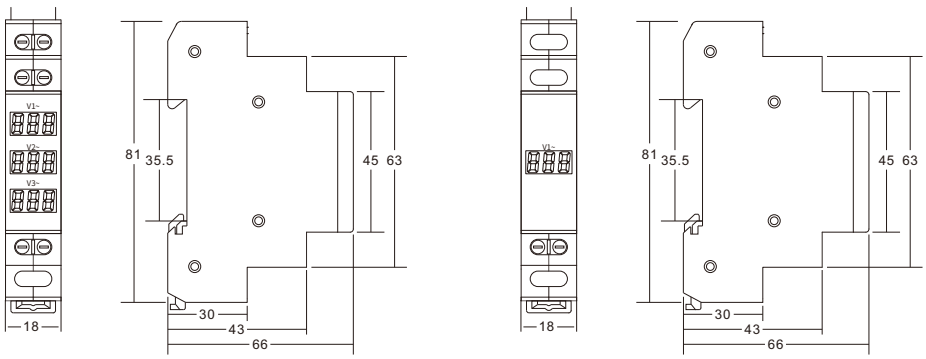
EKMV3

EKMV1

Technical Data

Electrical Features	Type	EKMV1: Single phase 1 LED digital display EKMV3: Three phase 3 LED digital display
	Terminal for wiring	Single phase L+N Three phase 3L+3N
	Digital colour	Red, Green
	Measurement voltage range	AC 80V~500V
	Rated frequency	50/60Hz
	Working current	⩽20mA
	Measuring accuracy	1.0
	Measuring rate	＞200MS/time
	Protection degree	IP20
	Electrical Life	⩾15000 hours
Working Conditions	Ambient temperature(with daily average⩽35°C)	-5°C~+40°C
	Storage temperature	-25°C~+70°C
	Air relative humidity	10-80%(no condensation)
	Working pressure	80~160Kpa
	Sunniness	No sunniness
Installation	Terminal for wiring	1.5mm^2
	Mounting	On DIN rail EN60715(35mm) by means of fast clip device

Overall and Installation Dimension(mm)



Technical Data

Application

Applicable to circuit with rated voltage 230V～and rated frequency 50/60Hz,used to power electric bell of extra low voltage.

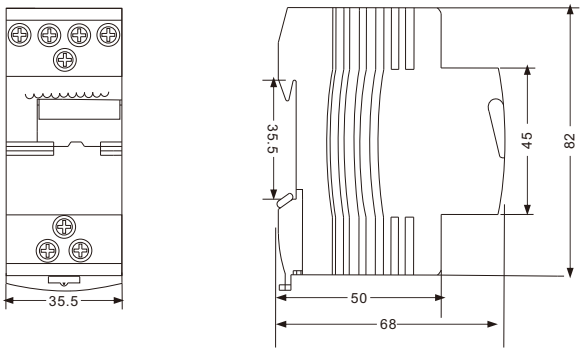
Construction and Feature

- Safe electrical separation between primary and secondary circuit
- Provides extra low voltage up to 24V
- Low temperature rising
- High output accuracy
- Extra overload capacity up to 25% within 24 hours

Electrical Features

Rated input voltage	230V AC
Rated output voltage	8, 12, 16, 24V
Rated frequency	50/60Hz
Rated power output	8VA
Consumption	0.9W
Service period	Continuous operating
Pollution class	2
Connection terminals	Pillar terminal with clamp
Connection capacity	Rigid conductor 10mm^2
Installation	On symmetrical DIN rail 35mm
	Panel mounting
Terminal Connection Height	H=15.5mm

Overall and Installation Dimension(mm)



Technical Data

Application

The electric bell is suitable for audible signaling for intermittent use only in domestic and commercial installations.

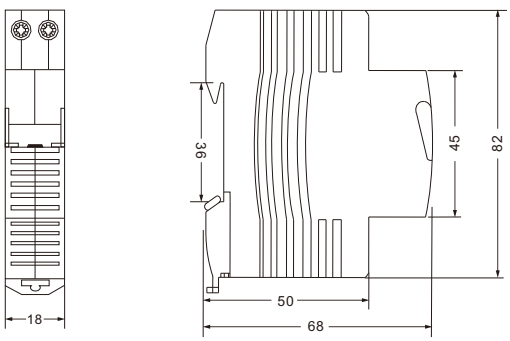
Construction and Feature

Elegant appearance,compact size and easy installation
Low consumption
Product with rated current up to 24V AC to be powered by bell transformer EKEB.

Electrical Features

Rated voltage	8,12,24,230V AC
Rated frequency	50/60Hz50/60Hz
Service mode	Intermittent
Connection terminal	Pillar terminal with clamp
Connection capacity	Rigid conductor 10mm^2
Installation	On symmetrical DIN rail 35mm
	Panel mounting
Terminal Connection Height	H=17mm

Overall and Installation Dimension(mm)



EKSL1, EKSL3,EKSL1M,EKSL3M

Modular Signal Lamp ---------- Standard_ IEC60947-5-1

EKSL1

EKSL3

EKSL1M EKSL3M

Technical Data

Application

The Modular Signal Lamp is applicable to circuit with rated voltage 230V~and frequency 50/60Hz for visual indication and signaling.

Construction and Feature

- Low service duration, minimum power consumption
- Compact design in modular size
- Easy installation

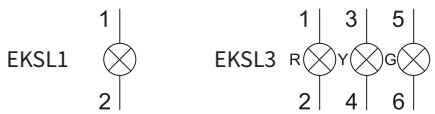
Technical Data

	Rated voltage	230V AC, 100V AC, 48V AC/DC, 24V AC/DC
	Rated frequency	50/60Hz
	Colour	EKSL1 Red, green, yellow EKSL3 Red/Green/Yellow, Red/Green/Blue
	Connection terminal	Pillar terminal with clamp
	Connection capacity	Rigid conductor 1.5mm^2
	Installation	On symmetrical DIN rail 35mm Panel mounting

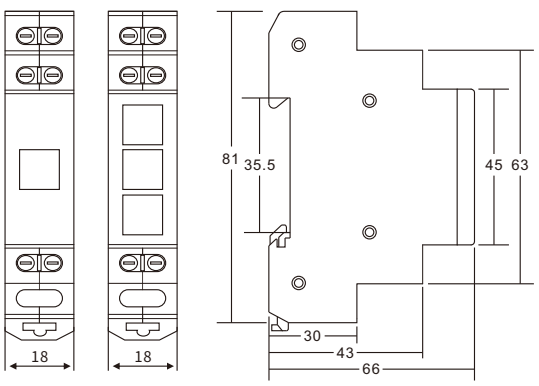
EKSL1 EKSL3 signal lamp

	Max power	0.6W
	Illumination	LED
	Service duration	30,000 hours

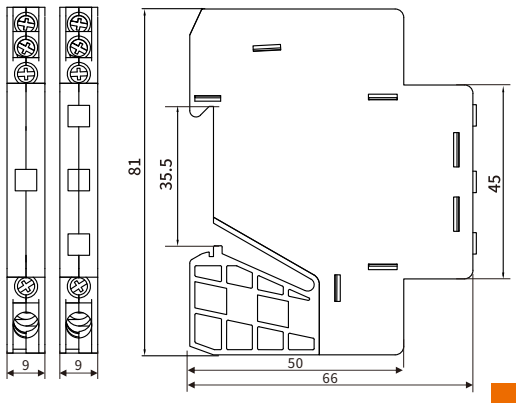
Circuit Diagram



Overall and Installation Dimension(mm)



EKSL1,EKSL3



EKSL1M,EKSL3M

EKCS101

Changeover Switch

Standard_ IEC60947-3

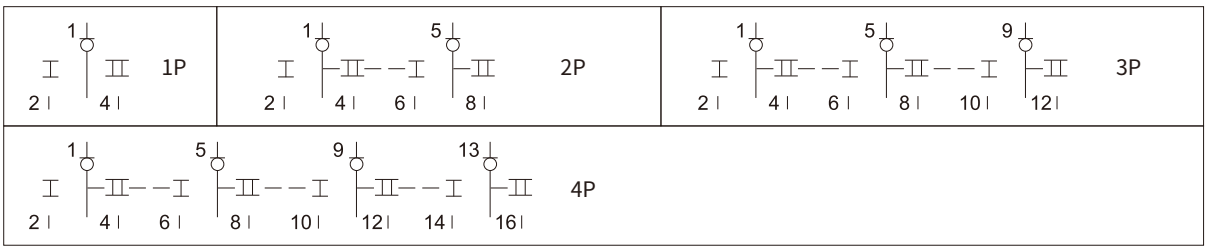


Application

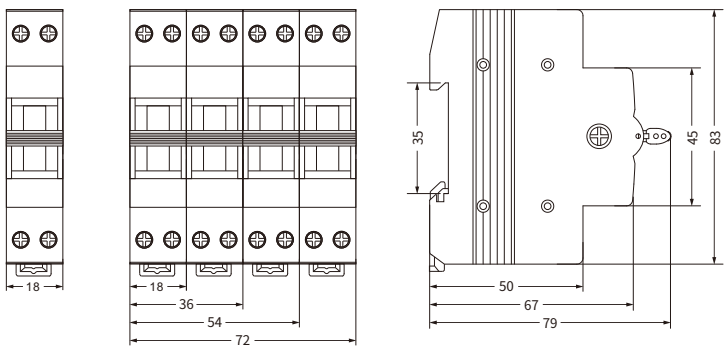
The Changeover Switch can switch on, Load and break the circuit under normal conditions, using as Switch Disconnectors.

Technical Data	Rated Voltage	240/415V~
	Rated Current	16,25,32,40A
	Rated Frequency	50/60Hz
	Number of Poles	1,2,3,4P
	Contact form	1-0-2
Electrical Features	Electrical Life	1500 Cycles
	Mechanical Life	8500 Cycles
	Protection degree	IP20
	Ambient Temperature	-5°C...40°C
Electrical Features	Terminal/Cable size	16mm^2
	Mounting	On DIN rail EN60715(35mm) by means of fast clip device.

Circuit Diagram



Overall and Installation Dimension(mm)



EKCS101H

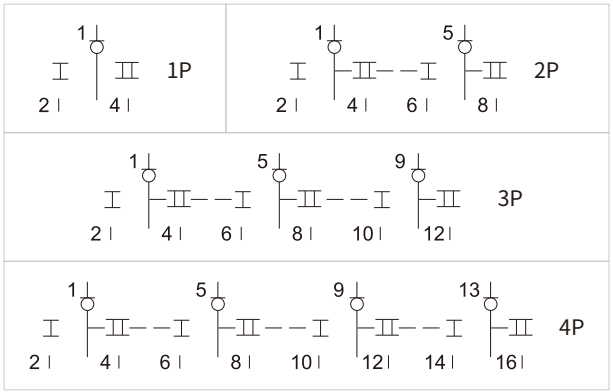
Changeover Switch

Standard_ IEC60947-3

Techniacal Data

Rated Voltage	240/415V~
Rated Current	16,25,32,40,63,80A
Rated Frequency	50/60Hz
Number of Poles	1,2,3,4P
Contact form	I-0-II
Electrical Life	1500 Cycles
Mechanical Life	10000 Cycles
Protection degree	IP20
Ambient Temperature	-5°C to 40°C
Terminal/Cable size	25mm^2
Installation	Mounting on 35mm DIN rail

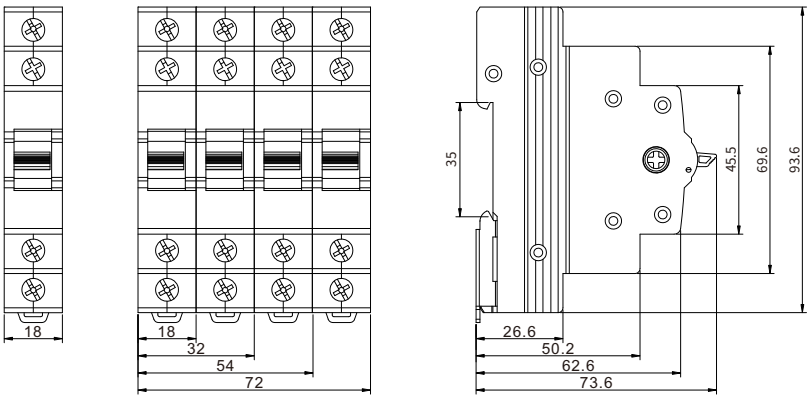
Connection Diagrams / Technical Marking



"I"	Incoming Terminals (Main Supply)	2, 6, 10 & 14
"II"	Incoming Terminals (Standby Supply)	4, 8, 12 & 16
	Outgoing Terminals (to load)	1, 5, 9 & 13

- Mid position of knob is 'OFF' position

Overall and Installation Dimension(mm)



EKCS101G

Changeover Switch

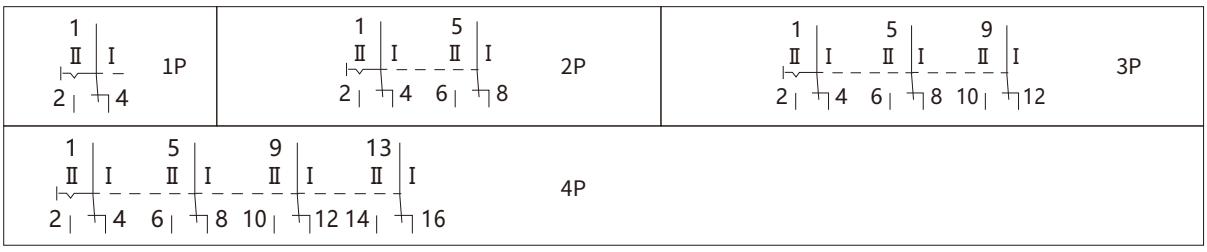
Standard_ IEC60947-3

Application

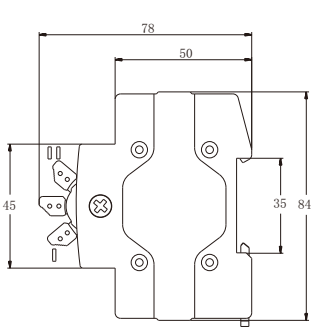
The Changeover Switch can switch on, Load and break the circuit under normal conditions, using as Switch Disconnectors.

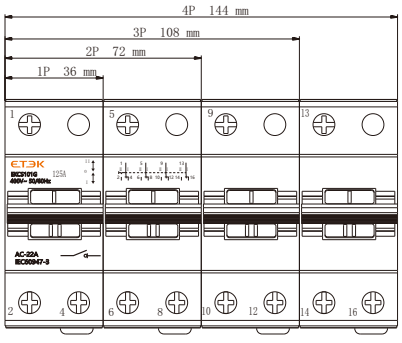
Technical Data	Rated Voltage	240/415V~
	Rated Current	63,80,100,125A
	Rated Frequency	50/60Hz
	Number of Poles	1,2,3,4P
	Contact form	1-0-2
Electrical Features	Electrical Life	1500 Cycles
	Mechanical Life	8500 Cycles
	Protection degree	IP20
	Ambient Temperature	-5°C...40°C
Electrical Features	Terminal/Cable size	50mm²
	Mounting	On DIN rail EN60715 (35mm) by means of fast clip device

Circuit Diagram



Overall and Installation Dimension(mm)





EKCS201

Changeover Switch

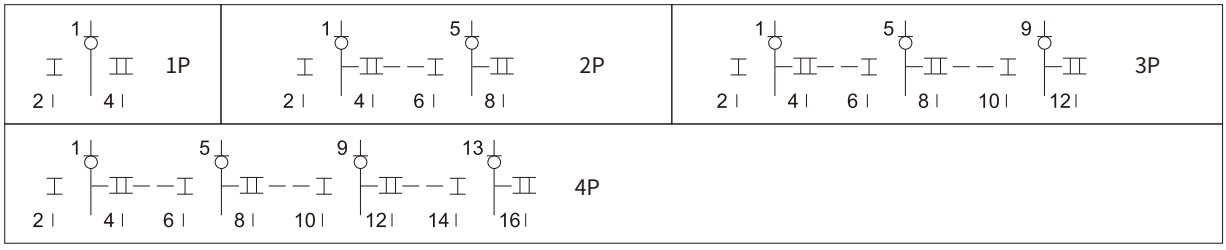
Standard_ IEC60947-3

Application

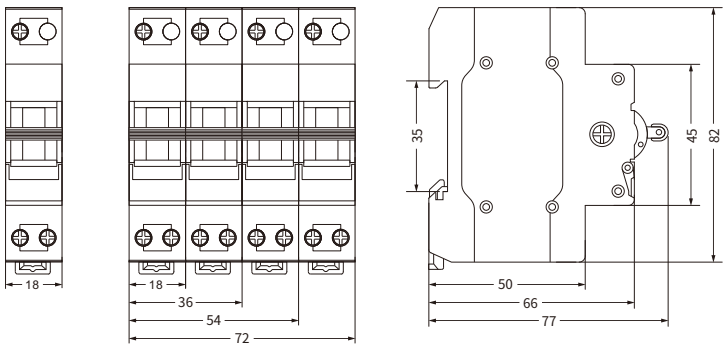
The Changeover Switch can switch on, Load and break the circuit under normal conditions, using as Switch Disconnectors.

Technical Data	Rated Voltage	240/415V~
	Rated Current	16,25,32,40A
	Rated Frequency	50/60Hz
	Number of Poles	1,2,3,4P
	Contact form	1-0-2
Electrical Features	Electrical Life	1500 Cycles
	Mechanical Life	8500 Cycles
	Protection degree	IP20
	Ambient Temperature	-5°C...40°C
Electrical Features	Terminal/Cable size	16mm^2
	Mounting	On DIN rail EN60715 (35mm) by means of fast clip device.

Circuit Diagram



Overall and Installation Dimension(mm)



EKP20 EKP7 EKP20B

Modular Socket ---------- Standard_ IEC60884

EKP20

EKP7

EKP20B

Technical Data

EKP20,EKP20B and EKP7 Modular Socket can be used together with our modular products for connection of mobile devices, tools or electric and electronic non- Modular equipments directly inside civil and industrial switchboards.

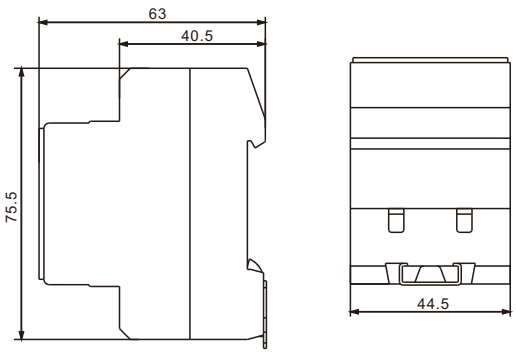
Application

Model	Rated current(A)	Standard	Width(mm)	Connection capacity
EKP20	16A	Germany	44.5	⩽4mm^2
EKP7	16A	France	44.5	⩽4mm^2
EKP20B	13A	UK	44.5	⩽4mm^2

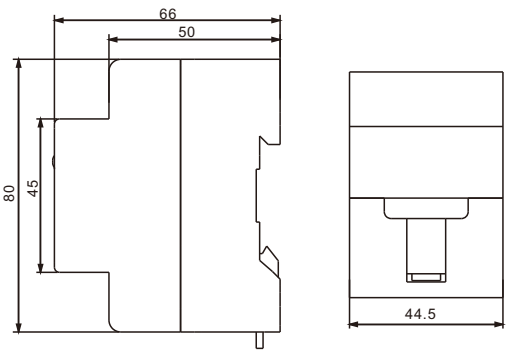
Electrical Features

Main voltage	230/400V, 50Hz/60Hz
Electric life	5,000 times
Rated insulation voltage Ui	500V
Rated impulse withstand voltage Uimp	5,000V
Dielectric test voltage at ind. Freq. For 1 min.	2.8kV
Mounting category	II, III
Pollution degree	2
Protection class	IP20
Standard mounting	35mm DIN rail
Ambient temperature	-5°C to +40°C
Storage temperature	-25°C to +70°C

Overall and Installation Dimension(mm)



EKP20



EKP7

Modular Fuse Base

Standard_ IEC60269-2


EKF1-32PV


EKF1-32N 1P


EKF1-63 4P


EKF1-125 2P


EKF1-32L 4P


EKF1-63L 1P


EKF1-63L 3P


EKF1-125L 3P

Technical Data

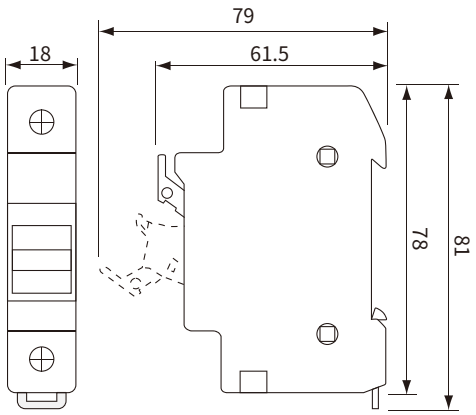
Rated current In		32A,63A,125A
Model No.	General type	EKF1-32,EKF1-63,EKF1-125
	With Indicator type	EKF1-32L,EKF1-63L,EKF1-125L
Poles		1P,2P,3P,4P,1P+N,3P+N
Utilization category		AC-22A
Rated voltage Ue		240/415V~
Insulation voltage Ui		500V
Rated frequency		50/60Hz
Rated impulse withstand voltage (1.2/50) Uimp		4,000V
Electrical life		1,500Cycles
Mechanical life		8,500Cycles
Operating frequency		120/h
Protection degree		IP20
Tightening torque	EKF1-32	1.5Nm 14In-lbs
	EKF1-63	2.5Nm 22In-lbs
	EKF1-125	3.5Nm 30In-lbs
Terminal size for cable	EKF1-32	16mm² 18-5AWG
	EKF1-63	25mm² 18-3AWG
	EKF1-125	50mm² 18-2AWG
Ambient temperature(with daily average≤35℃)		-5℃~+40℃
Storage temperature		-25℃~+70℃
Mounting		On DIN rail EN60715(35mm) by means of fast clip device

Specifications

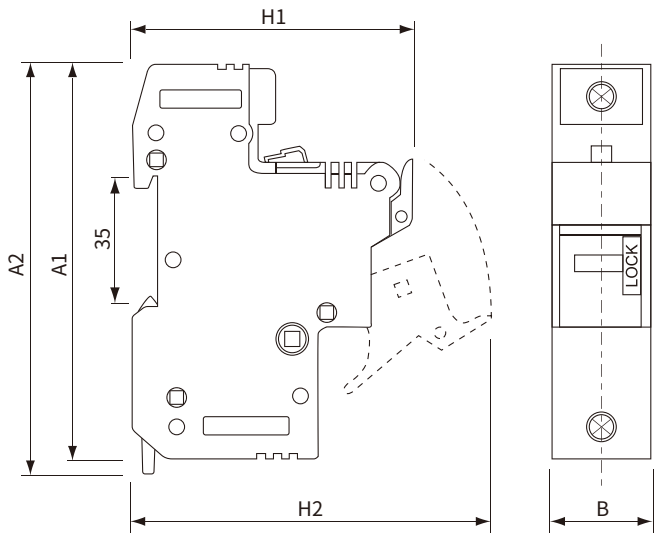
Model No.	Poles	Wide / Pole(mm)	Current Rating	Fuse Link Matched	Size of Fuse Link
EKF1-32N	1P+N	18	32A	EKFL10	10x38mm
EKF1-32NL					
EKF1-32	1-4P,3P+N	18	32A	EKFL10,EKFL10DC	10x38mm
EKF1-32L					
EKF1-63	1-4P,3P+N	27	63A	EKFL14	14x51mm
EKF1-63L					
EKF1-125	1-4P,3P+N	35	125A	EKFL22	22x58mm
EKF1-125L					

Overall and Installation Dimension(mm)

EKF1-32



EKF1-63, EKF1-125



Size	A1	A2	B	H1	H2
EKF1-63	108	111	27	76	100
EKF1-125	127	128	35	77	104

Technical Data

Material	Porcelain,Copper
Rated Voltage Ui	AC 500V,600V
Rated current In	1-125A
Dimensions	10x38,14x51,22x58
Character	gG,aM,oR
Breaking capacity	100kA,120kA

Specifications

Current Rating		Size & Mode No.			
					
		10x38mm	14x51mm	22x58mm	10x38mm(DC)
1A		EKFL1001			EKFL1001DC
2A		EKFL1002			EKFL1002DC
4A		EKFL1004			EKFL1004DC
6A		EKFL1006	EKFL1406		EKFL1006DC
8A		EKFL1008	EKFL1408		EKFL1008DC
10A		EKFL1010	EKFL1410		EKFL1010DC
12A		EKFL1012	EKFL1412		EKFL1012DC
16A		EKFL1016	EKFL1416		EKFL1016DC
20A		EKFL1020	EKFL1420		EKFL1020DC
25A		EKFL1025	EKFL1425	EKFL2225	EKFL1025DC
32A		EKFL1032	EKFL1432	EKFL2232	
40A			EKFL1440	EKFL2240	
50A			EKFL1450	EKFL2250	
63A			EKFL1463	EKFL2263	
80A				EKFL2280	
100A				EKFL22100	
125A				EKFL22125	
Breaking capacity	gG type AC 500V	120kA	120kA	120kA	
	aM type AC 500V	100kA	100kA	100kA	
	oR type AC 600V	100kA	100kA	100kA	
	Gpv type DC 1000V				40kA
Voltage Rating		AC 690V	AC 690	AC 690	DC 1000V
Weight(g)		8.4	20.5	58	10.3

Impulse Relays

The impulse relays are used to control, by means of pushbuttons, lighting circuits consisting of:
- Incandescent lamps, low-voltage halogen lamps, etc. (resistive loads)
- Fuorescent lamps, discharge lamps, etc. (inductive loads)

Impulse Relays Are Used

- Closing of the impulse relay pole(s) is triggered by an impulse on the coil.
- Having two stable mechanical positions, the pole(s) will be opened by the next impulse. Each impulse received by the coil reverses the position of the pole(s).
- Can be controlled by an unlimited number of pushbuttons.
- Zero energy consumption.

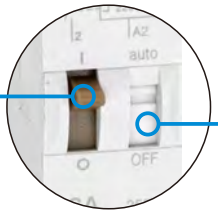
Yellow Clip

- A simple clip-on system for fexible auxiliaries combination and improved robustness
- For electrical and mechanical connections

- Insulated terminals IP20

- Built-in or optional auxiliary function: state indication, centralised control, latched control, control for illuminated pushbutton, step-by-step control, time delay

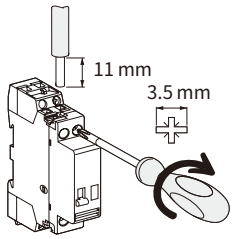
- Manual controls on front face: direct and priority manual control by O-I toggle
- Mechanical contact position indicator



- Disconnection of remote control by selector switch (except for 4P single-piece EKLR16) for maintenance operation

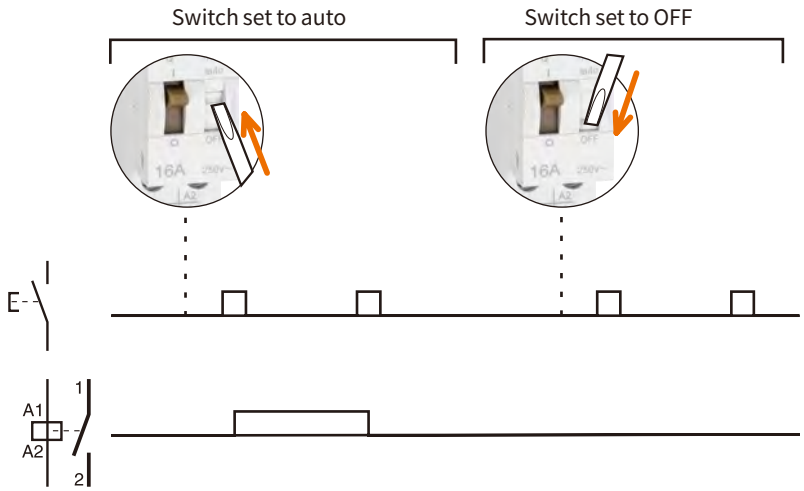
		Choice impulse relays auxiliaries				
Type		Standard EKLR16				
Rating	A	16				
Control voltage	V AC	230/240	130	48	24	45
	V DC	110	48	24	12	6

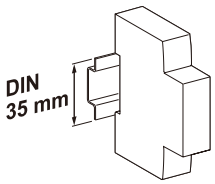
Connection



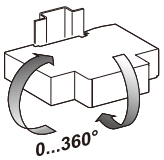
Type	Rating	Circuit	Tightening torque	Copper cables	
				Rigid or ferrule	Flexible or ferrule
			DB122945		
EKLR16	16 A	Control	1 N.m	0.5 to 4 mm^2	1 to 4 mm^2
		Power		1.5 to 4 mm^2	1.5 to 4 mm^2

Operation

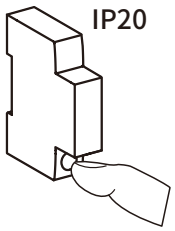


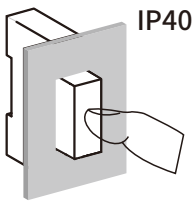


Clip on DIN rail 35 mm.



Indifferent position of installation.





Technical Data

Control circuit		
Dissipated power (during the impulse)		1, 2P: 19 VA
Illuminated PB control		Max. current 3 mA (if > use an ATLz)
Operating threshold		Min. 85 % of Un in conformance with IEC/EN60669-2-2
Duration of the control order		50 ms to 1 s (200 ms recommended)
Response time		
Power circuit		
Voltage rating (Ue)	1P, 2P	24 ...250 V AC
Frequency		50 Hz or 60 Hz
Maximum number of operations per minute		5
Maximum number of switching operation a day		100
Additional characteristics to IEC/EN 60947-3		
Insulation voltage (Ui)		440 V AC
Pollution degree		3
Rated impulse withstand voltage (Uimp)		6 kV

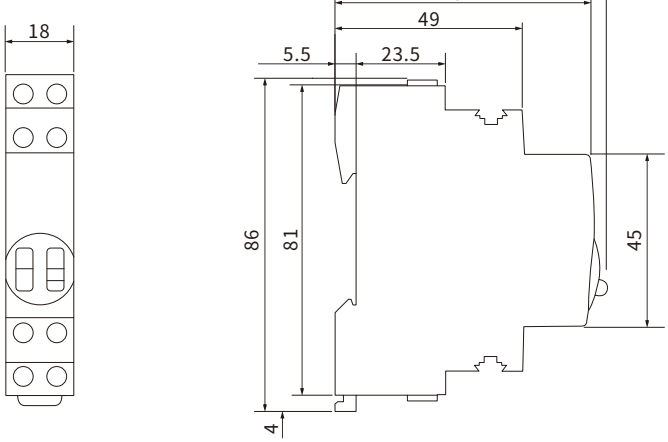
Technical Data

Endurance (O-C)		
Electrical to IEC/EN 60947-3		200,000 cycles (AC21)
		100,000 cycles (AC22)
Overvoltage category		IV
Other characteristics		
Degree of protection (IEC 60529)	Device only	IP20
	Device in modular enclosure	IP40 Insulation class II
Operating temperature		-20°C to +50°C
Storage temperature		-40°C to +70°C
Tropicalization (IEC 60068-1)		Treatment 2 (relative humidity 95 % at 55°C)

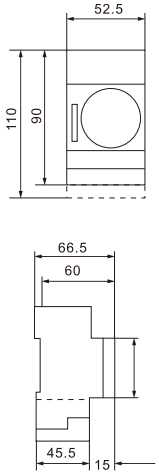
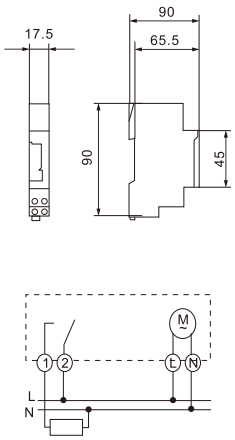
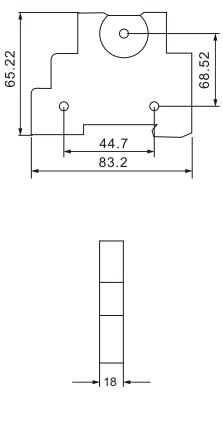
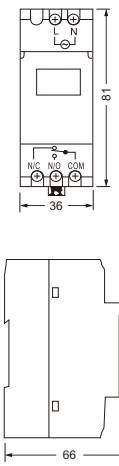
Security

Accessories	Yellow clips	Spacer
		
Function		
	Ensure the mechanical and/or electrical link between impulse relays and their auxiliaries	Required to reduce temperature rise of modular devices installed side by side. Recommended to separate electronic devices (thermostat, programmable clock, etc.) from electromechanical devices (relays, contactors).
Specifcations		
Width in 9 mm modules	-	1

Overall and Installation Dimension(mm)



EKTM Timer

Classification		24 Hours Timer		Timer	Weekly Programmable Timer
Model		EKTM-181H	EKTM-180A	EKTM-E8	EKTM-20A
Appearace					
Contact Capacity		AC250V 16A	AC250V 16A	AC250V 16A	AC250V 20A
Full Timing Range		24h	24h	7m	Per week or per day cycle
Contact resistanca		⩽50mΩ	⩽50mΩ	⩽50mΩ	⩽50mΩ
Insulation Resistance		⩾100mΩ	⩾100mΩ	⩾100mΩ	⩾100mΩ
Coil Voltage		110,230V AC	110,230V AC	110,230V AC	230V AC 85%~110%
Life	Electrical	10^5times	10^5times	10^5times	10^5times
	Mechanical	10^7times	10^7times	10^7times	10^7times
Operating Temperature		-40°C+55°C	-10°C+55°C	-40°C+55°C	-20°C+55°C
Dimensions(mm)					
Storage Battery (Working Reserve)		Time 150h	Time 70h	—	Rated Voltage: AC200V 50Hz 85%-110% Contact Form:1NC/1NO Accuracy : ⩽2s/day(25°C) Expectancy Display:LCD Mounting Form: From panel,DIN Rail Programmable: 8time week or day Memory Backup:15days
Minimum Setting Unit		30Minutes	15Minutes	0.5Minutes	
Set uo Times		30m/per times 48 times	15m/per times 96 times	1M,1.5M2M,2.5M 3M,3.5M,4.5M,5M 5.5M,6M,6.5M,7M	

Description

The Distribution Box is used for Terminal power distributing system	
The Distribution Box are completed with Din-rail 35mm and Neutral Terminal	
Electrical Rating	100A/single phase,63A/three phase,240/415V AC 50/60Hz
Protection Degree	IP40
Material	Shell: ABS,ABS-UV Fire-proof
	Door: Transparent PC
Installation Method	Surface-Mounted and Flush-Mounted

General Type-Full Plastic

Surface-Mounted type

Model No.				Ways	Dimension(mm)			Specification of N terminal		
ABS	Code	ABS-UV	Code		L	W	H	W*H	Screw Qty	Bar Qty
EKDB2S2	601101	EKDB2S2V	601201	2	49	130	85			
EKDB2S3	601102	EKDB2S3V	601202	3	94	148	85			
EKDB2S4	601103	EKDB2S4V	601203	4	111	200	93	6*8	4	1
EKDB2S6	601104	EKDB2S6V	601204	6	148	200	97	6*8	6	2
EKDB2S8	601105	EKDB2S8V	601205	8	184	200	96	6*8	8	2
EKDB2S10	601106	EKDB2S10V	601206	10	220	200	92	6*8	10	2
EKDB2S12	601107	EKDB2S12V	601207	12	254	200	96	6*8	12	2
EKDB2S15	601108	EKDB2S15V	601208	15	310	200	97	6*8	15	2
EKDB2S18	601109	EKDB2S18V	601209	18	362	219	97	6*8	18	3
EKDB2S24	601110	EKDB2S24V	601210	24(2x12)	271	324	98	6*8	24	4
EKDB2S36	601111	EKDB2S36V	601211	36(2x18)	269	457	100	6*8	36	6

Flush-Mounted type

Model No.				Ways	Dimension(mm)				Specification of N terminal		
ABS	Code	ABS-UV	Code		L	W	H1	H2	W*H	Screw Qty	Bar Qty
EKDB2F2	601121	EKDB2F2V	601221	2	66	137	85	25			
EKDB2F3	601122	EKDB2F3V	601222	3	94	148	85	26			
EKDB2F4	601123	EKDB2F4V	601223	4	135	221	87	26	6*8	4	1
EKDB2F6	601124	EKDB2F6V	601224	6	171	221	88	26	6*8	6	2
EKDB2F8	601125	EKDB2F8V	601225	8	208	221	87	26	6*8	8	2
EKDB2F10	601126	EKDB2F10V	601226	10	244	221	86	26	6*8	10	2
EKDB2F12	601127	EKDB2F12V	601227	12	280	221	88	24	6*8	12	2
EKDB2F15	601128	EKDB2F15V	601228	15	334	221	89	29	6*8	15	2
EKDB2F18	601129	EKDB2F18V	601229	18	399	252	86	27	6*8	18	3
EKDB2F24	601130	EKDB2F24V	601230	24(2x12)	300	341	98	31	6*8	24	4
EKDB2F36	601131	EKDB2F36V	601231	36(2x18)	300	480	98	31	6*8	36	6

Double Rows Terminal type-Full Plastic（Australia Type）

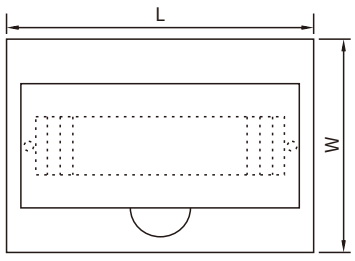
Surface-Mounted type

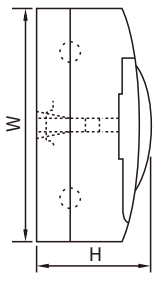
Model No.				Ways	Dimension(mm)			Specification of N terminal		
ABS	Code	ABS-UV	Code		L	W	H	W*H	Screw Qty	Bar Qty
EKDB2S4T2	601303	EKDB2S4VT2	601403	4	111	200	93	10*14	8	1
EKDB2S6T2	601304	EKDB2S6VT2	601404	6	148	200	97	10*14	12	2
EKDB2S8T2	601305	EKDB2S8VT2	601405	8	184	200	96	10*14	16	2
EKDB2S12T2	601307	EKDB2S12VT2	601407	12	254	200	96	10*14	24	2
EKDB2S18T2	601309	EKDB2S18VT2	601409	18	362	219	97	10*14	36	3
EKDB2S24T2	601310	EKDB2S24VT2	601410	24(2x12)	271	324	98	10*14	48	4
EKDB2S36T2	601311	EKDB2S36VT2	601411	36(2x18)	269	457	100	10*14	72	6

Flush-Mounted type

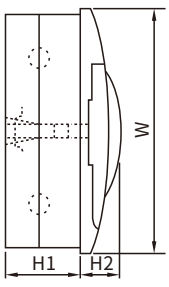
Model No.				Ways	Dimension(mm)				Specification of N terminal		
ABS	Code	ABS-UV	Code		L	W	H1	H2	W*H	Screw Qty	Bar Qty
EKDB2F4T2	601323	EKDB2F4VT2	601423	4	135	221	87	26	10*14	8	1
EKDB2F6T2	601324	EKDB2F6VT2	601424	6	171	221	88	26	10*14	12	2
EKDB2F8T2	601325	EKDB2F8VT2	601425	8	208	221	87	26	10*14	16	2
EKDB2F12T2	601327	EKDB2F12VT2	601427	12	280	221	88	24	10*14	24	2
EKDB2F18T2	601329	EKDB2F18VT2	601429	18	399	252	86	27	10*14	36	3
EKDB2F24T2	601330	EKDB2F24VT2	601430	24(2x12)	300	341	98	31	10*14	48	4
EKDB2F36T2	601331	EKDB2F36VT2	601431	36(2x18)	300	480	98	31	10*14	72	6

Overall and Installation Dimension(mm)





Surface-Mounted type



Flush-Mounted type

EKDB4

Distribution Box

Standard_ IEC62208

Description

The Distribution Box is used for Terminal power distributing system

The Distribution Box are completed with Din-rail 35mm and Neutral Terminal (Selectable)

Electrical Rating	100A/single phase,63A/three phase,240/415V AC 50/60Hz
Protection Degree	IP65
Material	Shell: ABS
	Door: Transparent PC
Installation Method	Surface-Mounted

Type of open door from right to left

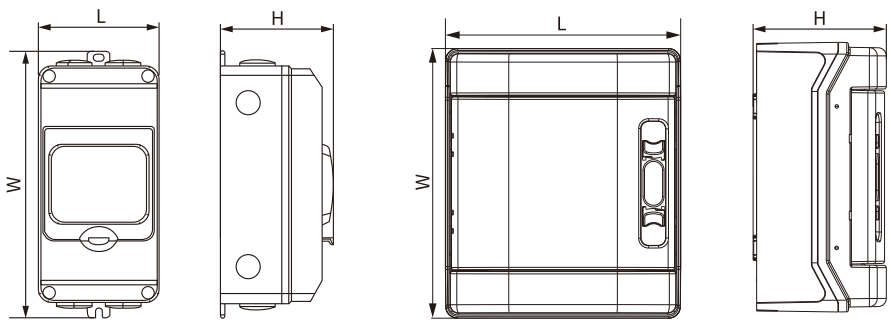
Without Neutral Terminal Model

Model No.		Ways	Dimension(mm)		
PC	Code		L	W	H
EKDB4P4R	604241	4	100	221	94
EKDB4P6R	604242	6	201	230	114
EKDB4P8R	604243	8	237	230	114
EKDB4P12R	604245	12	308	230	114
EKDB4P18R	604246	18	417	230	114
EKDB4P24R	604247	24(2x12)	309	391	114

With Neutral Terminal Model

Model No.		Ways	Dimension(mm)		
PC	Code		L	W	H
EKDB4P4RT	604211	4	100	221	94
EKDB4P6RT	604212	6	201	230	114
EKDB4P8RT	604213	8	237	230	114
EKDB4P12RT	604215	12	308	230	114
EKDB4P18RT	604216	18	417	230	114
EKDB4P24RT	604217	24(2x12)	309	391	114

Overall and Installation Dimension(mm)

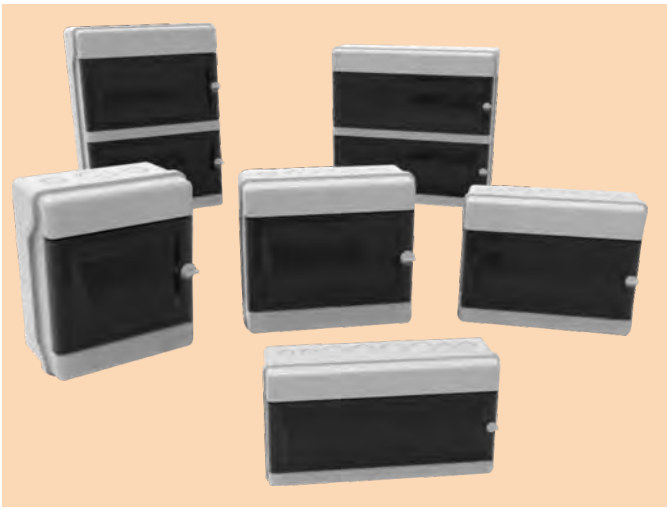


Ways: 4

EKDB4S

Distribution Box

Standard_ IEC62208



Description

- Suitable for PV system, equipped with a surge protector and an isolator,provid-ing isolation, leakage andgrounding protection.
- Enclosures are made of polycarbonate(PC-ABS)materials. IK08 high impact-resistance and light enoug to easily carry. IP65 rating for outdoor installation, resisting UV radiation, water, dust, reducing corrosion.
- Through transparency cover, you can observe interior mechanism directly.
- Reliable components, with TUV, CE certificated, in accordance with IEC standard.
- IP65 cable connector. Waterproof cable connector & MC4 connector are optional.

Type of open door from right to left

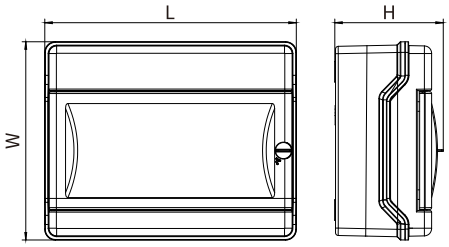
Without Neutral Terminal Model

Model No.		Ways	Dimension(mm)		
PC	Code		L	W	H
EKDB4S6R	604342	6	165	200	108
EKDB4S9R	604343	9	219	200	108
EKDB4S12R	604344	12	273	215	118
EKDB4S18R	604345	18	381	215	118
EKDB4S24R	604346	24(2x12)	273	365	118
EKDB4S36R	604347	36(2x18)	381	365	118

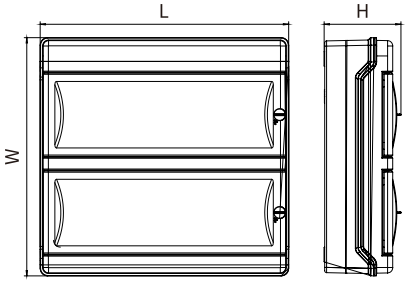
With Neutral Terminal Model

Model No.		Ways	Dimension(mm)		
PC	Code		L	W	H
EKDB4S6RT	604312	6	165	200	108
EKDB4S9RT	604313	9	219	200	108
EKDB4S12RT	604314	12	273	215	118
EKDB4S18RT	604315	18	381	215	118
EKDB4S24RT	604316	24(2x12)	273	365	118
EKDB4S36RT	604317	36(2x18)	381	365	118

Overall and Installation Dimension(mm)



Ways: 6,9,12,18



Ways: 24, 36

EKDB6

Distribution Box

Standard_ IEC61439-3
IEC62208

Description

The Distribution Box is used for Terminal power distributing system	
The Distribution Box are completed with Din-rail 35mm and Neutral Terminal (Selectable)	
Electrical Rating	100A/single phase,240/415V AC 50/60Hz
Protection Degree	IP40
Material	Steel
Installation Method	Surface-Mounted

Empty Box

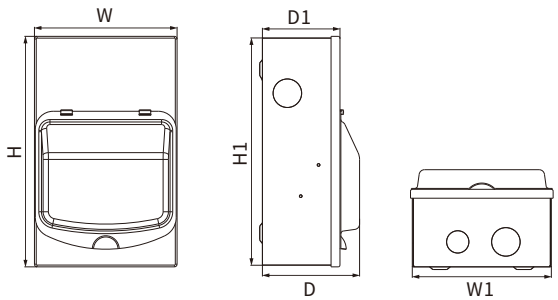
With Neutral and Earth Terminal

Model No.		Ways	Dimension(mm)					
Model	Code		H	W	D	D1	W1	H1
EKDB6S6	612221	6	258.6	160	109	87	156	255
EKDB6S10	612222	10	258.6	232	109	87	228	255
EKDB6S14	612223	14	258.6	304	109	87	300	255
EKDB6S18	612224	18	258.6	376	109	87	372	255
EKDB6S24	612225	24	258.6	484	109	87	480	255

Complete set of Distribution Box with Busbar, Neutral and Earth Terminals , Cables Connected

Reference No.	Size of Box	Description	Free ways	MCB Selected by user	RCBO Selected by user
EKDB6S6-IS	6WAYS	DB Box with 1x2P 100A Isolator	4	MCB 1P 6KA, type B or type C, Rated Current: 6A,10A,16A,20A,25A,32A,40A	RCBO 1P+N 6KA, type B or type C, I△n: 30mA Rated Current: 6A,10A,16A,20A,25A,32A,40A
EKDB6S6-RCD	6WAYS	DB Box with 1x2P 80A RCD	4		
EKDB6S10-IS-RCD	10WAYS	DB Box with 1x2P 100A Isolator + 1x2P 80A RCD	6		
EKDB6S10-IS	10WAYS	DB Box with 1x2P 100A Isolator	8		
EKDB6S10-RCD	10WAYS	DB Box with 1x2P 80A RCD	8		
EKDB6S14-IS-RCD	14WAYS	DB Box with 1x2P 100A Isolator + 1x2P 80A RCD	10		
EKDB6S14-IS-RCD2	14WAYS	DB Box with 1x2P 100A Isolator + 2x2P 80A RCD	4+4		
EKDB6S18-IS-RCD	18WAYS	DB Box with 1x2P 100A Isolator + 1x2P 80A RCD	14		
EKDB6S18-IS-RCD2	18WAYS	DB Box with 1x2P 100A Isolator + 2x2P 80A RCD	6+6		
EKDB6S24-IS-RCD2	24WAYS	DB Box with 1x2P 100A Isolator + 2x2P 80A RCD	9+9		

Overall and Installation Dimension(mm)



EKDB7

Distribution Box

Standard_ IEC62208



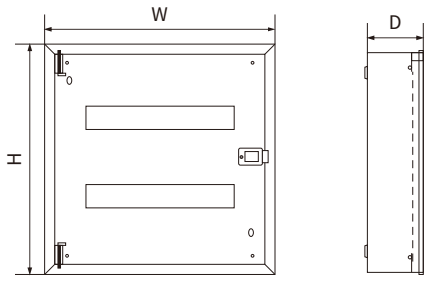
Description

The Distribution Box is used for Terminal power distributing system	
The Distribution Box are completed with Din-rail 35mm and Neutral Terminal (Selectable)	
Electrical Rating	125A single phase/three phase,240/415V AC 50/60Hz
Protection Degree	IP40
Material	Steel
Installation Method	Surface-Mounted and Flush-Mounted

MCB Type

Model No.			Ways	Dimension(mm)			Thickness(mm)		
Model	Row	Code		H	W	D	Door	Body	M.P
EKDB7113	1	616001	13	275	355	110	1.2	1.2	1
EKDB7226	2	616002	26	380	355	110	1.2	1.2	1
EKDB7339	3	616003	39	530	355	110	1.2	1.2	1
EKDB7452	4	616004	52	680	355	110	1.2	1.2	1
EKDB7118	1	616101	18	275	475	110	1.2	1.2	1
EKDB7236	2	616102	36	380	475	110	1.2	1.2	1
EKDB7354	3	616103	54	530	475	110	1.2	1.2	1
EKDB7472	4	616104	72	680	475	110	1.2	1.2	1
EKDB7590	5	616105	90	830	475	110	1.2	1.2	1
EKDB7122	1	616201	22	275	547	110	1.2	1.2	1
EKDB7244	2	616202	44	380	547	110	1.2	1.2	1
EKDB7366	3	616203	66	530	547	110	1.2	1.2	1
EKDB7488	4	616204	88	680	547	110	1.2	1.2	1
EKDB75110	5	616205	110	830	547	110	1.2	1.2	1

Overall and Installation Dimension(mm)



EKDB7

Distribution Box

Standard_ IEC62208



Description

The Distribution Box is used for Terminal power distributing system	
The Distribution Box are completed with Din-rail 35mm and Neutral Terminal (Selectable)	
Electrical Rating	250A three phase,240/415V AC 50/60Hz
Protection Degree	IP40
Material	Steel
Installation Method	Surface-Mounted and Flush-Mounted

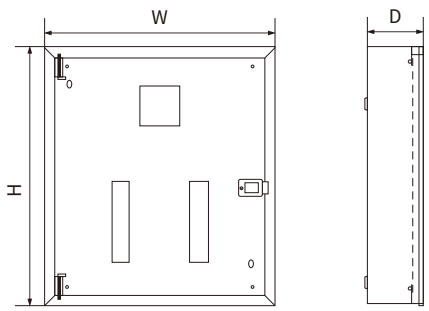
MCCB Type

Model No.			Ways	Dimension(mm)			Thickness(mm)		
Model	Model Type	Code		H	W	D	Door	Body	M.P
EKDB7-04M	125、160、250	616301	12	573	400	130	1	1	1
EKDB7-06M		616302	18	627	400	130	1	1	1
EKDB7-08M		616303	24	681	400	130	1	1	1
EKDB7-10M		616304	30	735	400	130	1	1	1
EKDB7-12M		616305	36	789	400	130	1.2	1.2	1
EKDB7-14M		616306	42	843	400	130	1.2	1.2	1
EKDB7-16M		616307	48	897	400	130	1.2	1.2	1
EKDB7-20M		616308	60	1005	400	130	1.2	1.2	1

Isolation Switch Type

Model No.			Ways	Dimension(mm)			Thickness(mm)		
Model	Model Type	Code		H	W	D	Door	Body	M.P
EKDB7-04I	125、160、250	616401	12	473	400	110	1	1	1
EKDB7-06I		616402	18	527	400	110	1	1	1
EKDB7-08I		616403	24	581	400	110	1	1	1
EKDB7-10I		616404	30	635	400	110	1	1	1
EKDB7-12I		616405	36	689	400	110	1.2	1.2	1
EKDB7-14I		616406	42	743	400	110	1.2	1.2	1
EKDB7-16I		616407	48	797	400	110	1.2	1.2	1
EKDB7-20I		616408	60	905	400	110	1.2	1.2	1

Overall and Installation Dimension(mm)



EKDB8

Distribution Box

Standard_ IEC62208

Description

The Distribution Box is used for Terminal power distributing system	
Electrical Rating	63-1250A,Single phase/Three phase, 240/415V AC 50/60Hz
Protection Degree	IP65
Material	Steel
Installation Method	Surface-Mounted

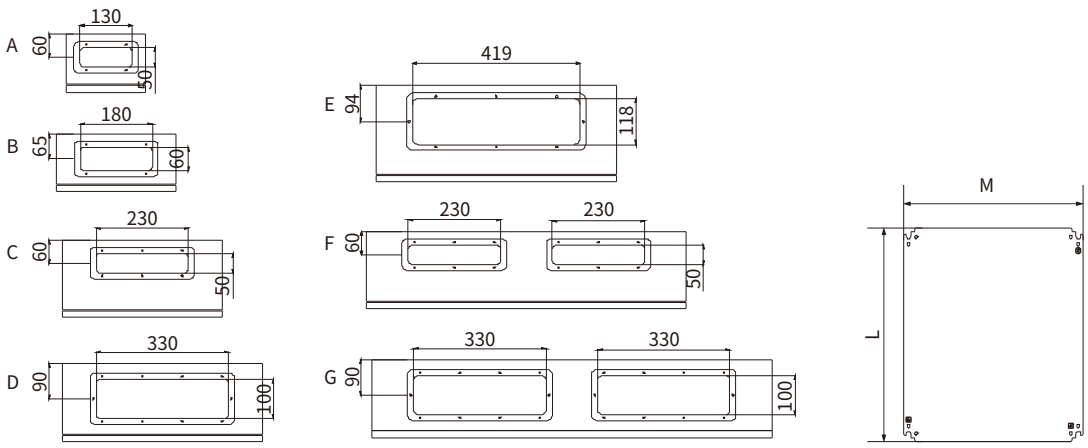
Main Technique Parameter

Model No.		Size(mm)			Thickness(mm)			Bottom hole size	Lock QTY	Mounting plate size(mm)	
Model	Code	H	W	D	Door	Body	M.P			L	M
EKDB8 2020/15	610001	200	200	150	1.2	1.2	2	A	1	150	150
EKDB8 2520/15	610002	250	200	150	1.2	1.2	2	A	1	250	150
EKDB8 3020/15	610003	300	200	150	1.2	1.2	2	A	1	250	150
EKDB8 3020/20	610004	300	200	200	1.2	1.2	2	A	1	250	150
EKDB8 3025/15	610005	300	250	150	1.2	1.2	2	A	1	250	200
EKDB8 3025/20	610006	300	250	200	1.2	1.2	2	A	1	250	200
EKDB8 3030/15	610007	300	300	150	1.2	1.2	2	B	1	250	250
EKDB8 3030/20	610008	300	300	200	1.2	1.2	2	B	1	250	250
EKDB8 3030/25	610009	300	300	250	1.2	1.2	2	B	1	250	250
EKDB8 4030/15	610010	400	300	150	1.2	1.2	2	B	1	350	250
EKDB8 4030/20	610011	400	300	200	1.2	1.2	2	B	1	350	250
EKDB8 4030/25	610012	400	300	250	1.2	1.2	2	B	1	350	250
EKDB8 4030/30	610013	400	300	300	1.2	1.2	2	B	1	350	250
EKDB8 4040/15	610014	400	400	150	1.2	1.2	2	C	1	350	250
EKDB8 4040/20	610015	400	400	200	1.2	1.2	2	C	1	350	350
EKDB8 4040/25	610016	400	400	250	1.2	1.2	2	C	1	350	350
EKDB8 4040/30	610017	400	400	300	1.2	1.2	2	C	1	350	350
EKDB8 5030/15	610018	500	300	150	1.2	1.2	2	B	1	450	350
EKDB8 5030/20	610019	500	300	200	1.2	1.2	2	B	1	450	250
EKDB8 5030/25	610020	500	300	250	1.2	1.2	2	B	1	450	250
EKDB8 5040/15	610021	500	400	150	1.2	1.2	2	C	1	450	350
EKDB8 5040/20	610022	500	400	200	1.2	1.2	2	C	1	450	350
EKDB8 5040/25	610023	500	400	250	1.2	1.2	2	C	1	450	350
EKDB8 5040/30	610024	500	400	300	1.2	1.2	2	C	1	450	350
EKDB8 5050/20	610025	500	500	200	1.2	1.2	2	D	1	450	450
EKDB8 5050/25	610026	500	500	250	1.2	1.2	2	D	1	450	450
EKDB8 5050/30	610027	500	500	300	1.2	1.2	2	D	1	450	450
EKDB8 6040/15	610028	600	400	150	1.2	1.2	2	C	2	550	350
EKDB8 6040/20	610029	600	400	200	1.2	1.2	2	C	2	550	350
EKDB8 6040/25	610030	600	400	250	1.2	1.2	2	C	2	550	350
EKDB8 6040/30	610031	600	400	300	1.2	1.2	2	C	2	550	350
EKDB8 6050/15	610032	600	500	150	1.2	1.2	2	D	2	550	450
EKDB8 6050/20	610033	600	500	200	1.2	1.2	2	D	2	550	450
EKDB8 6050/25	610034	600	500	250	1.2	1.2	2	D	2	550	450
EKDB8 6050/30	610035	600	500	300	1.2	1.2	2	D	2	550	450
EKDB8 6060/15	610036	600	600	150	1.2	1.2	2	D	2	550	550
EKDB8 6060/20	610037	600	600	200	1.2	1.2	2	D	2	550	550
EKDB8 6060/25	610038	600	600	250	1.2	1.2	2	D	2	550	550
EKDB8 6060/30	610039	600	600	300	1.2	1.2	2	D	2	550	550

Main Technique Parameter

Model No.		Size(mm)			Thickness(mm)			Bottom hole size	Lock QTY	Mounting plate size(mm)	
Model	Code	H	W	D	Door	Body	M.P			L	M
EKDB8 7050/15	610040	700	500	150	1.2	1.2	2	D	2	650	450
EKDB8 7050/20	610041	700	500	200	1.2	1.2	2	D	2	650	450
EKDB8 7050/25	610042	700	500	250	1.2	1.2	2	D	2	650	450
EKDB8 7060/20	610043	700	600	200	1.2	1.2	2	D	2	650	550
EKDB8 7060/25	610044	700	600	250	1.2	1.2	2	D	2	650	550
EKDB8 7060/30	610045	700	600	300	1.5	1.5	2	D	2	650	550
EKDB8 8060/20	610046	800	600	200	1.5	1.5	2	D	2	750	550
EKDB8 8060/25	610047	800	600	250	1.5	1.5	2	D	2	750	550
EKDB8 8060/30	610048	800	600	300	1.5	1.5	2	D	2	750	550
EKDB8 8080/20	610049	800	800	200	1.5	1.5	2	F	2	750	750
EKDB8 8080/25	610050	800	800	250	1.5	1.5	2	F	2	750	750
EKDB8 8080/30	610051	800	800	300	1.5	1.5	2	F	2	750	750
EKDB8 10060/20	610052	1000	600	200	1.5	1.5	2	D	2	950	550
EKDB8 10060/25	610053	1000	600	250	1.5	1.5	2	D	3	950	550
EKDB8 10060/30	610054	1000	600	300	1.5	1.5	2	D	3	950	550
EKDB8 10070/20	610055	1000	700	200	1.5	1.5	2	D	3	950	650
EKDB8 10080/20	610056	1000	800	200	1.5	1.5	2	F	3	950	750
EKDB8 10080/25	610057	1000	800	250	1.5	1.5	2	F	3	950	750
EKDB8 10080/30	610058	1000	800	300	1.5	1.5	2	F	3	950	750
EKDB8 10080/40	610059	1000	800	400	1.5	1.5	2	F	3	950	750
EKDB8 100100/25	610060	1000	1000	250	1.5	1.5	2	G	3	950	950
EKDB8 100100/30	610061	1000	1000	300	1.5	1.5	2	G	3	950	950
EKDB8 12060/20	610062	1200	600	20	1.5	1.5	2	D	3	1150	550
EKDB8 12060/25	610063	1200	600	250	1.5	1.5	2	D	3	1150	550
EKDB8 12060/30	610064	1200	600	300	1.5	1.5	2	D	3	1150	550
EKDB8 12080/20	610065	1200	800	20	1.5	1.5	2	F	3	1150	750
EKDB8 12080/25	610066	1200	800	250	1.5	1.5	2	F	3	1150	750
EKDB8 12080/30	610067	1200	800	300	1.5	1.5	2	F	3	1150	750
EKDB8 12080/40	610068	1200	800	400	1.5	1.5	2	F	3	1150	750
EKDB8 120100/25	610069	1200	1000	250	1.5	1.5	2	G	3	1150	750
EKDB8 120100/30	610070	1200	1000	300	1.5	1.5	2	G	3	1150	950
EKDB8 120100/40	610071	1200	1000	400	1.5	1.5	2	G	3	1150	950
EKDB8 14060/30	610072	1400	600	300	1.5	1.5	2	D	3	1350	550
EKDB8 14080/30	610073	1400	800	300	1.5	1.5	2	F	3	1350	750
EKDB8 14080/40	610074	1400	800	400	1.5	1.5	2	F	3	1350	750
EKDB8 140100/30	610075	1400	1000	300	1.5	1.5	2	G	3	1350	950
EKDB8 140120/30	610076	1400	1200	300	1.5	1.5	2	G	3	1350	1150

Overall and Installation Dimension(mm)



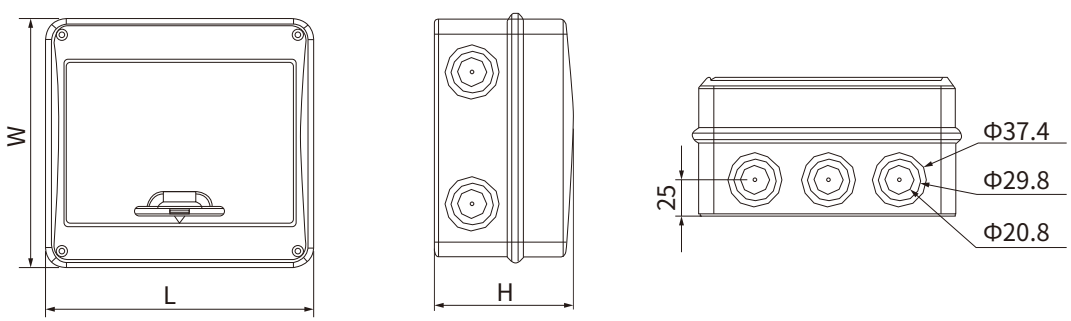
Product Function Introduction

- IP65 degree of protection
- Lock structure
- Cover hinge structure
- With accessory bag installation kit
- Built-in circuit baffle
- Surface frame loose structure
- With multiple ring knockout
- With copper terminal assemblies

EKDB9 Series Surface-Mounted Waterproof Distribution Box Product Data Summary Table

No.	Model and name	Ways	Ranked	Dimensions LxWxH	Zero and ground row configuration
1	EKDB9-5	5	Single row	129x170x95	Zero row: 3 holes Ground row: 3 holes
2	EKDB9-8	8		183x170x95	Zero row: 5 holes Ground row: 5 holes
3	EKDB9-12	12		255x200x105	Zero row: 8 holes Ground row: 8 holes
4	EKDB9-15	15		309x200x105	Zero row: 8 holes Ground row: 8 holes
5	EKDB9-18	18		363x200x110	Zero row: 8 holes Ground row: 8 holes

Overall and Installation Dimension(mm)



EKDB10

Distribution Box ---------- Standard_ IEC60529

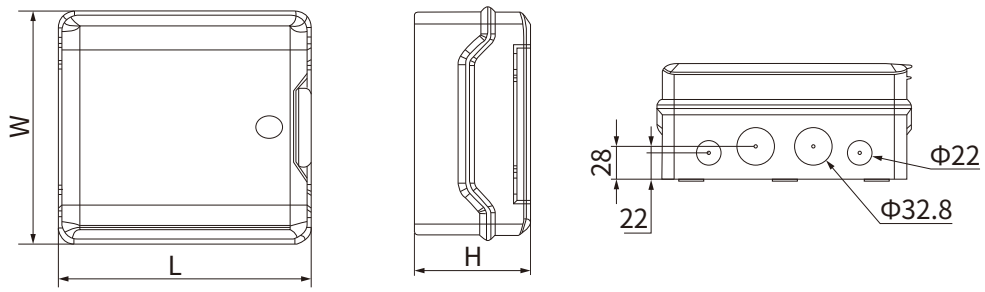
Product Function Introduction

- IP65 degree of protection
- Lock structure
- Reserved position for functional stickers
- Reserved for installation of anti-theft locks
- Circuit baffle structure
- Surface frame loose structure
- With knockout hole
- With copper terminal assemblies

EKDB10 Series Surface-Mounted Waterproof Distribution Box Product Data Summary Table

No.	Model and name	Ways	Ranked	Dimensions LxWxH	Zero and ground row configuration
1	EKDB10-4	4	Single row	128x200x100	Zero row: 3 holes Ground row: 3 holes
2	EKDB10-6	6		164x200x100	Zero row: 5 holes Ground row: 5 holes
3	EKDB10-9	9		218x200x100	Zero row: 5 holes Ground row: 5 holes
4	EKDB10-13	13		296x230x120	Zero row: 8 holes Ground row: 8 holes
5	EKDB10-15	15		332x230x120	Zero row: 8 holes Ground row: 8 holes
6	EKDB10-18	18		380x230x120	Zero row: 8 holes Ground row: 8 holes
7	EKDB10-26	26(2x13)	Double row	296x390x130	Zero row: Two 8 holes Ground row: Two 8 holes

Overall and Installation Dimension(mm)



The product data referred to in the company shall be subject to material object. Subject to change without notice.
The company has the final right to interpret.

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