

METAL CONSUMER UNITS

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RoHS

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

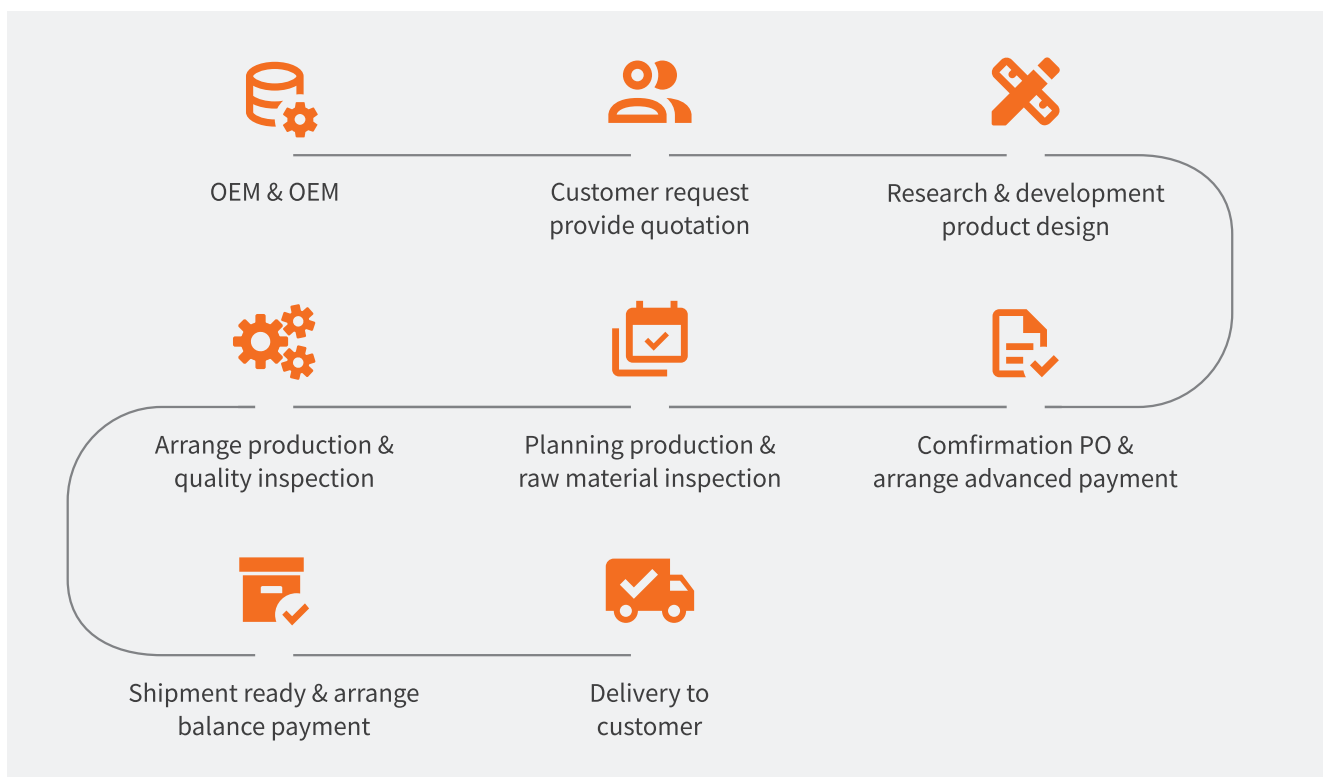


Wuhu Factory

WORKSHOPS



OEM & ODM BUSINESS

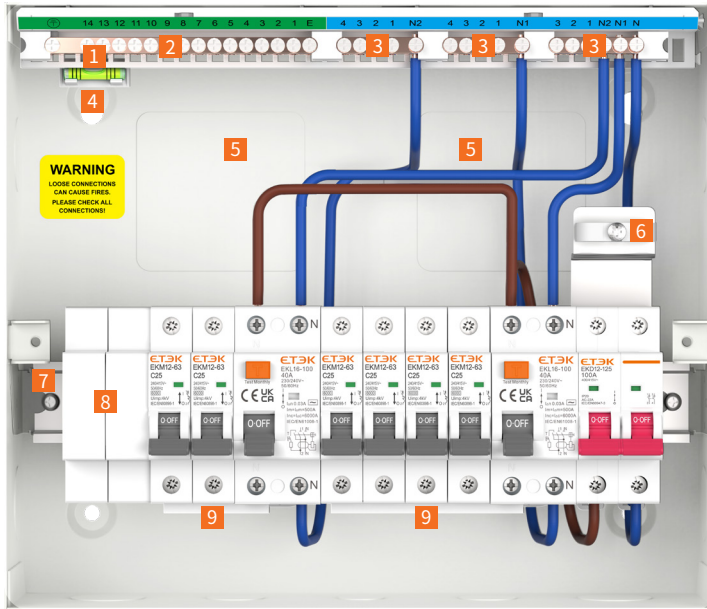


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Overview

ETEK EKDB16S(L) Consumer unit is designed to comply to the BS EN 61439-3. Constructed with non-combustible and durable metal casings, it provides a reliable, safe, and flexible solution for electrical installations. Its range of Metal Consumer is available from the 6 Ways up to 36 Ways.



- 1 Integrated spirit level for mounting
- 2 Earth terminals
- 3 Neutral terminals
- 4 Key holes for easy mounting
- 5 Large space for wiring
- 6 Mains tail clamp
- 7 Keyway DIN rail
- 8 Multi-function DIN rail blank
- 9 Snap-able busbar

Features

- Offers two types of enclosure: EKDB16S is the basic model; EKDB16SL integrated door lock.
- Backed out and captive combi-head screws, allows simple and speedy installation.
- Easily removable Din Rail.
- Color coded earth and neutral terminal locked at top of unit for ease of wiring.
- Fixing holes Tripod fixing to cope with uneven surfaces.
- Supporting Din Rail 'T' Bar Additional support to prevent bowing.

Consumer Unit Selection Guide

- Determine the type of consumer unit configuration required. e.g Split Load, Split Load, RCD Incomer, Dual RCD, High Integrity or Duplex. For each Switch Disconnecter or RCD to be used allow 2 modular ways.
- Determine the number of outgoing circuits required. e.g Cooker, Lighting, Ring Main etc. For each circuit to be protected by an MCB or RCBO allow 1 modular way.
- Determine the number of 'spare' modular ways required for future upgrades.
- Now add together the total number of modular ways required.
- Select from our range of Metal consumer units choose the type and size most appropriate for your requirements.

Note

All our consumer units are supplied with complete complement of earth and neutral terminals along with marking labels, Keyway DIN rail.

At the same time, we also provide Mains Tail Clamp, Snap-able busbar, Busbar Caps, DIN rail blank, Retrofit Locking Device, Grommet Strip, Link Cables, and other related accessories. If you have any need, you can confirm before placing an order.

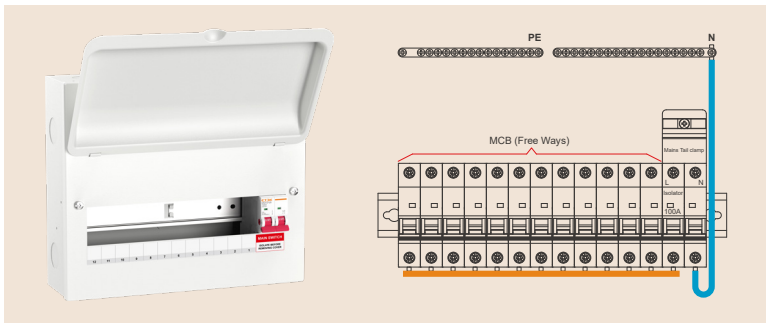
Instruction of Type code

EK	DB16S	14	L	-	I2RS
↓	↓	↓	↓		↓
①	②	③	④		⑤

Code name	Meaning	Code name	Meaning
①	ETEK Company	④	Blank: No lock L: Integrated door lock
②	DB box design code	⑤	I: Isolator 2: Quantity R:RCD S:SPD
③	Enclosure Size: 4,6,10,14,18,24,36		

Main Switch Consumer Unit (1N Busbar)

DB Box with 1x2P 100A Isolator

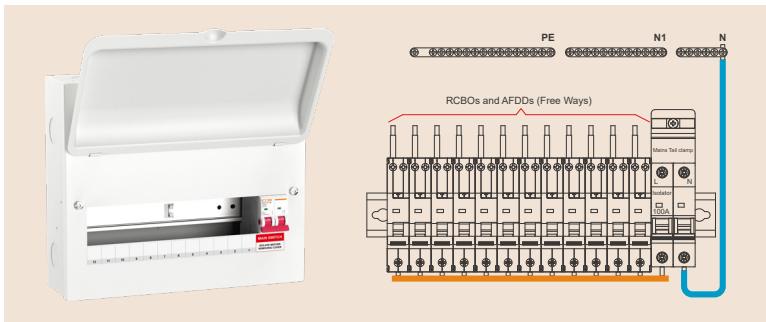


Reference No.	Size of Box	Free Ways
EKDB16S4(L)-I	4	2
EKDB16S6(L)-I	6	4
EKDB16S10(L)-I	10	8
EKDB16S14(L)-I	14	12
EKDB16S18(L)-I	18	16
EKDB16S24(L)-I	24	22

Allows for the use of MCBs, throughout.

Main Switch Consumer Unit (2N Busbars)

DB Box with 1x2P 100A Isolator

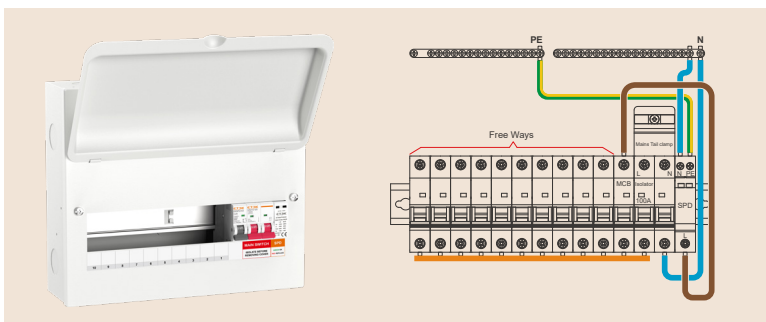


Reference No.	Size of Box	Free Ways
EKDB16S4(L)-I	4	2
EKDB16S6(L)-I	6	4
EKDB16S10(L)-I	10	8
EKDB16S14(L)-I	14	12
EKDB16S18(L)-I	18	16
EKDB16S24(L)-I	24	22

Allows for the use of RCBOs and AFDDs throughout.

Main Switch Consumer Unit with Surge Protection (1 module wide SPD)

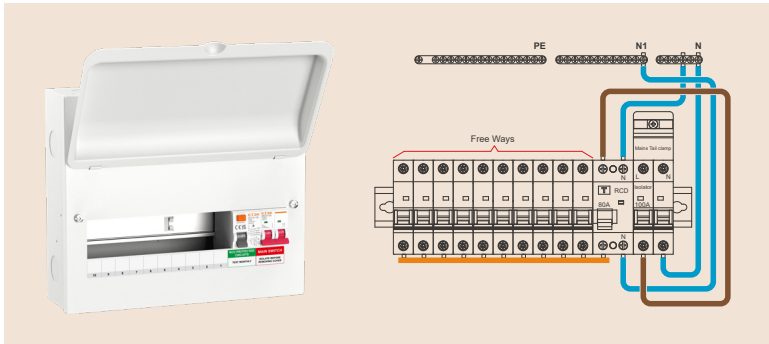
DB Box with 1x40kA T2 SPD(1P+NPE)+1x2P 100A Isolator +1X1P B32 MCB



Reference No.	Size of Box	Free Ways
EKDB16S10(L)-IS	10	6
EKDB16S14(L)-IS	14	10
EKDB16S18(L)-IS	18	14
EKDB16S24(L)-IS	24	20

Split Load Consumer Unit

DB Box with 1x2P 100A Isolator + 1x2P 80A 30mA RCD

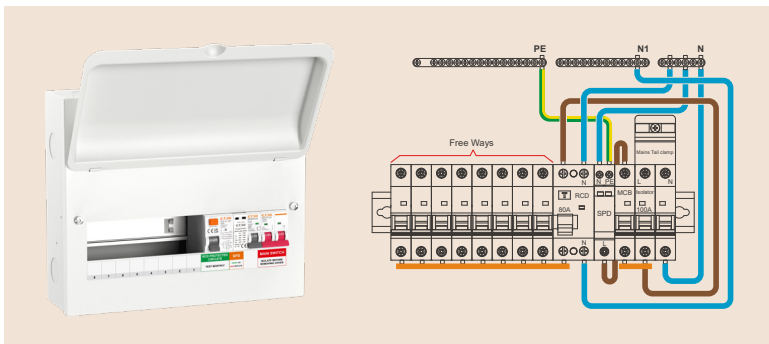


Reference No.	Size of Box	Free Ways
EKDB16S6(L)-IR	6	2
EKDB16S10(L)-IR	10	6
EKDB16S14(L)-IR	14	10
EKDB16S18(L)-IR	18	14
EKDB16S24(L)-IR	24	20

An arrangement which allows the use of MCBs, RCBOs & AFDDs immediately following the Main Switch and MCBs following the Split Load RCD.

Split Load Consumer with Surge Protection (1 module wide SPD)

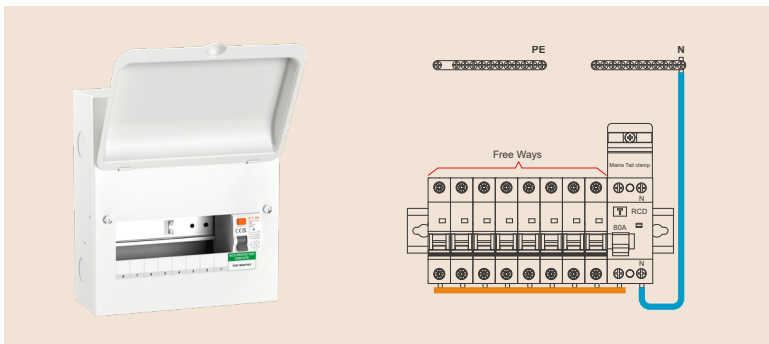
DB Box with 1x2P 100A Isolator + 1X1P B32 MCB + 1x40kA T2 SPD + 1x2P 80A 30mA RCD



Reference No.	Size of Box	Free Ways
EKDB16S14(L)-IRS	14	8
EKDB16S18(L)-IRS	18	12
EKDB16S24(L)-IRS	24	18

RCD Incomer Consumer Unit

DB Box with 1x2P 80A 30mA RCD

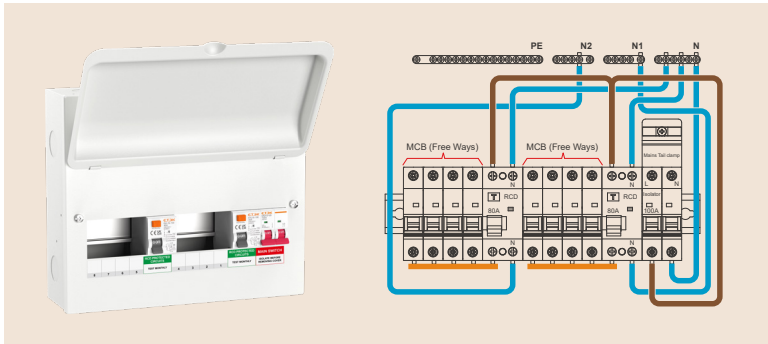


Reference No.	Size of Box	Free Ways
EKDB16S4(L)-R	4	2
EKDB16S6(L)-R	6	4
EKDB16S10(L)-R	10	8

Less common than the other types, an RCD incomer does not use a main switch. They are usually used as a sub-board to a main distribution panel.

Dual RCD Consumer Unit

DB Box with 1x2P 100A Isolator + 2x2P 80A 30mA RCD

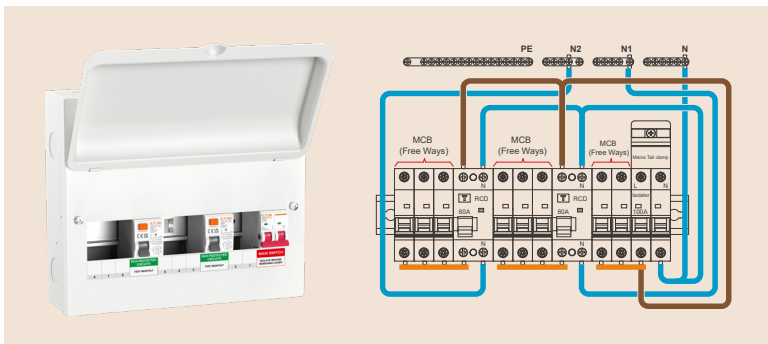


Reference No.	Size of Box	Free Ways
EKDB16S14(L)-2R	14	8
EKDB16S18(L)-2R	18	12
EKDB16S24(L)-2R	24	18

This unit utilizes MCBs throughout divided between two RCCBs. Circuit independence or separate electrical protection cannot be achieved here.

High Integrity Consumer Unit

DB Box with 1x2P 100A Isolator + 2x2P 80A 30mA RCD

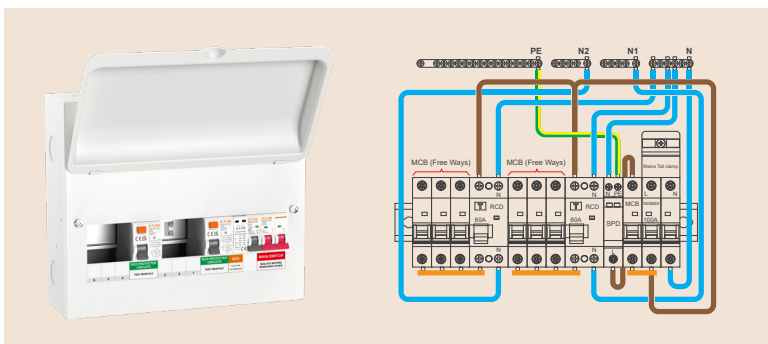


Reference No.	Size of Box	Free Ways
EKDB16S14(L)-I2R	14	8
EKDB16S18(L)-I2R	18	12
EKDB16S24(L)-I2R	24	18

A unit which allows for a number of MCBs used between two RCCBs but retaining provision for a small number of independent MCB, RCBO or AFDD circuits following the Main Switch.

High Integrity Consumer Unit with Surge Protection (1 module wide SPD)

DB Box with 1x2P 100A Isolator + 1X1P B32 MCB + 1x40kA T2 SPD + 2x2P 80A 30mA RCD



Reference No.	Size of Box	Free Ways
EKDB16S14(L)-I2RS	14	6
EKDB16S18(L)-I2RS	18	10
EKDB16S24(L)-I2RS	24	16

Duplex Consumer Unit

Duplex consumer units, which are also known as double bank, or dual row consumer units provide the facility to offer a wide range of configurations for applications which demand increased numbers of circuits.

Main Switch Consumer Unit

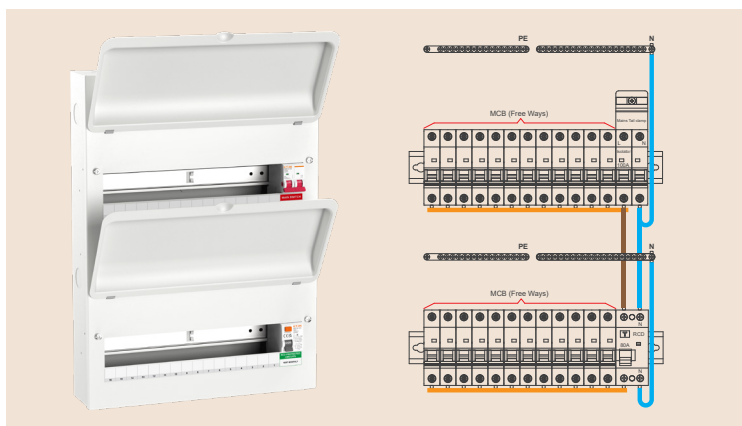
DB Box with 1x2P 100A Isolator



Reference No.	Size of Box	Free Ways
EKDB16S36(L)-I	36(2x18)	16+18

Main Switch Consumer Unit

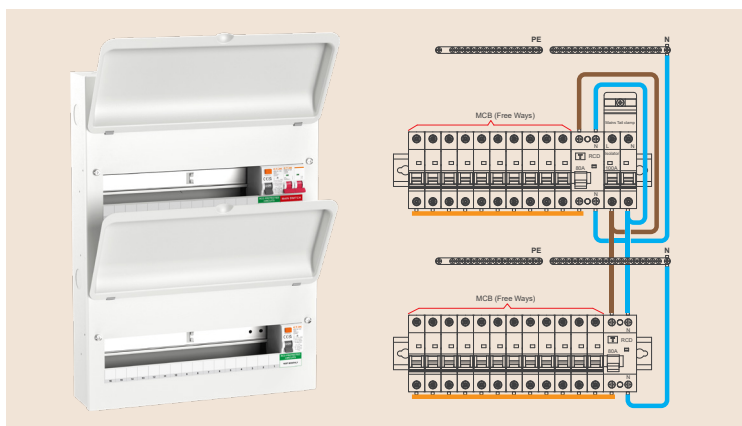
DB Box with 1x2P 100A Isolator + 1x2P 80A RCD



Reference No.	Size of Box	Free Ways
EKDB16S36(L)-IR	36(2x18)	16+16

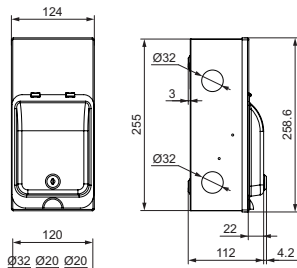
Main Switch Consumer Unit

DB Box with 1x2P 100A Isolator + 2x2P 80A RCD

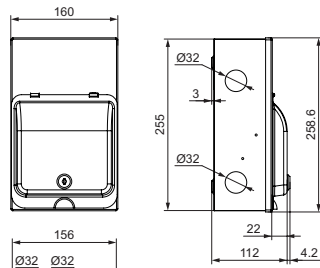


Reference No.	Size of Box	Free Ways
EKDB16S36(L)-I2R	36(2x18)	14+16

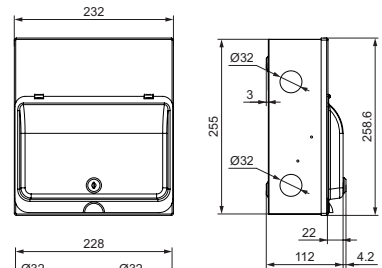
Dimension (mm)



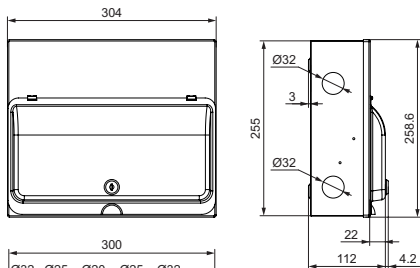
4 ways



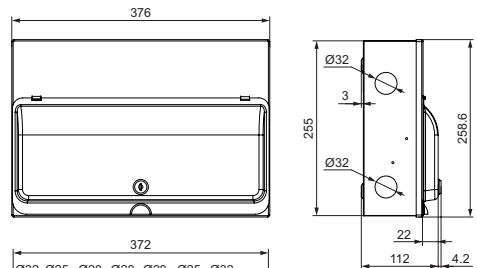
6 ways



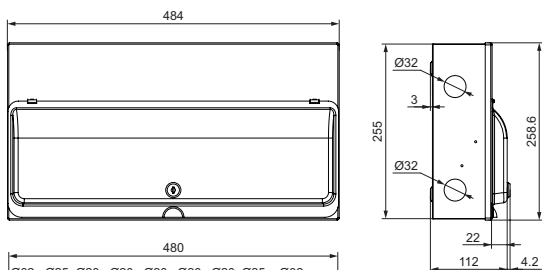
10 ways



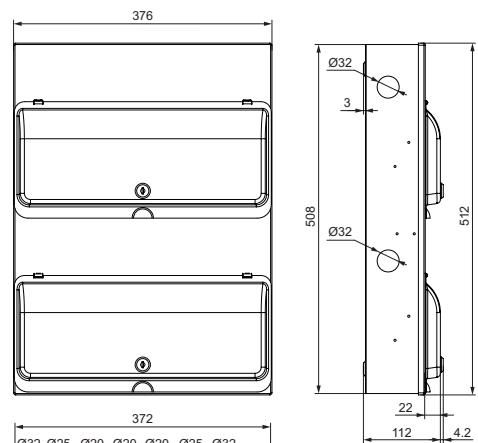
14 ways



18 ways

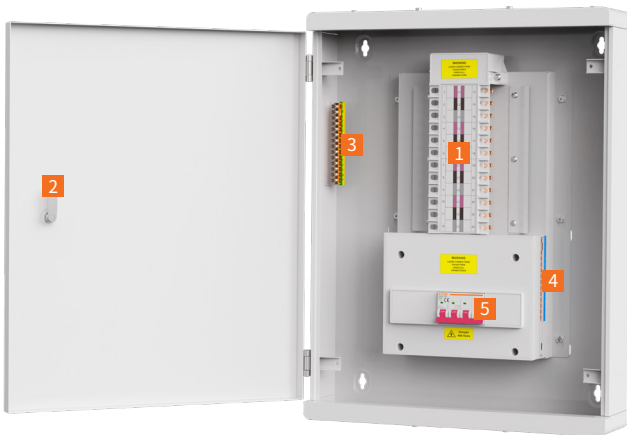


24 ways



36 ways

Product Introduction



- 1 Pan assembly with device end stops
- 2 Coin slot door lock
- 3 Neutral & earth terminals
- 4 Shrouded neutral terminals
- 5 Main switch

Overview

TP&N (Triple Pole and Neutral) Distribution Boards play a crucial role in electrical distribution systems, particularly in commercial and industrial environments. These boards are specifically designed to efficiently distribute electrical power across multiple circuits while ensuring protection and effective management.

TP&N distribution boards can be equipped with protective devices such as MCB, RCBO, AFDD, or SPD to ensure the electrical system operates efficiently and complies with safety standards. This not only protects equipment but also reduces the risk of electrical fires or shocks.

Features

- Complies with IEC/EN 60439-3.
- 4, 6, 8, 12, 16 & 22 TP&N outgoing ways.
- Supplied with lock and key for security.
- Removable top and bottom gland plates.
- Incoming main switch can be isolator switch or RCD. (Where an RCCB is to be used as incoming device, mounting accessory link kit)
- Compatible with the ETEK 6kA & 10kA circuit protection devices range.
- Equipped earth and neutral terminal on both the left- and right-hand side of board.
- Allows extension box to be installed on the top and bottom of the TPN board, providing more cabling space.

Instruction of Type code



Code name	Meaning
①	ETEK Company
②	DB box design code
③	Enclosure Size: 4, 6, 8, 12, 16, 22

Code name	Meaning
④	Main Switch: M:MCCB; I:Isolator; IS:Isolator+SPD; R:RCD; RS: RCD+SPD

Technical Data

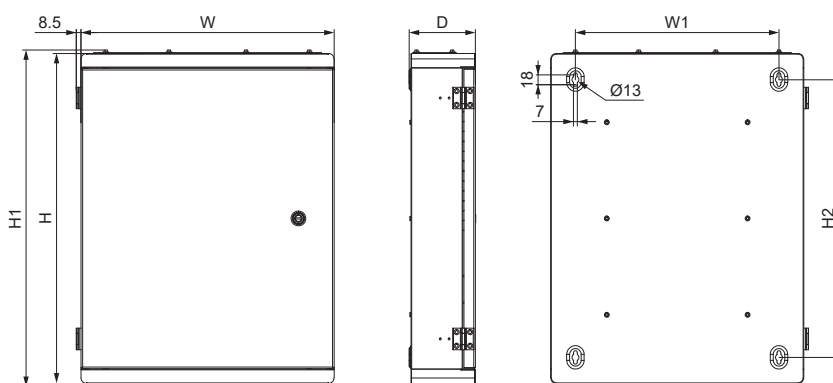
Standard	IEC/EN 60439-3
Rated operating voltage	230/400V
Rated current	Isolator Switch: 125A, RCD: 100A, MCCB: 250A
Frequency	50Hz
Phase	3
IP Protection degree	IP2XC
Manufacturing material	Steel
Installation	Wall mounting

Selection Form

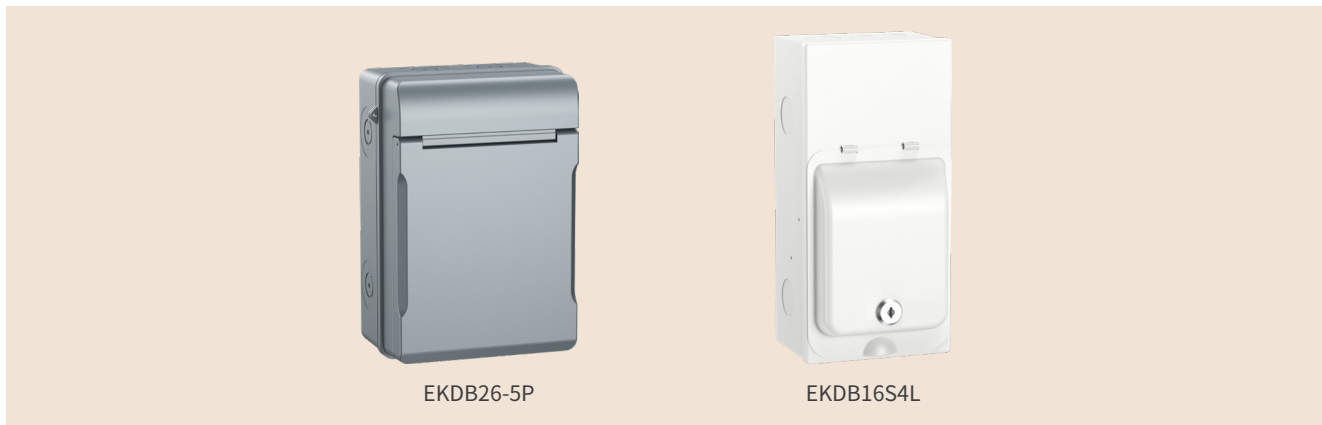
Reference No.	Description	Outgoing Ways	Dimensions HxWxD (mm)
EKTPN04-I	4 way, 125A isolator 4P main switch	4×TP / 12×SP	492×460×120
EKTPN06-I	6 way, 125A isolator 4P main switch	6×TP / 18×SP	546×460×120
EKTPN08-I	8 way, 125A isolator 4P main switch	8×TP / 24×SP	600×460×120
EKTPN12-I	12 way, 125A isolator 4P main switch	12×TP / 36×SP	708×460×120
EKTPN16-I	16 way, 125A isolator 4P main switch	16×TP / 48×SP	806×460×120
EKTPN22-I	22 way, 125A isolator 4P main switch	22×TP / 66×SP	1032×460×120

Note: ① Optional RCD as the main switch. (mounting accessory kit required)
 ② An additional SPD can be installed to provide surge protection.

Dimension (mm)



Reference No.	H	H1	H2	W	W1	D
EKTPN04	492	505	397	460	370	120
EKTPN06	546	559	451	460	370	120
EKTPN08	600	613	505	460	370	120
EKTPN12	708	721	613	460	370	120
EKTPN16	806	829	721	460	370	120
EKTPN22	1032	1044	937	460	370	120



EKDB26-5P

EKDB16S4L

Overview

A basic EV distribution board, also known as an EV charging station sub-panel, serves as the intermediary between your home's main electrical panel and the EV charger. Its primary function is to safely and efficiently distribute power to the charger while providing necessary circuit protection.

Etek Electric offers two types of metal EV distribution boards: IP65 waterproof for outdoor installations and IP20 for indoor installations. These boards are designed with various component combinations to meet the protection needs of most users, and they also offer customized services.

Features

- Complies with IEC/EN 60439-3
- IP65 or IP20 rated protection
- All metal construction
- Quick and easy installation
- Complete Kit
- EKDB26-5P reserved padlock position
- EKDB16S4L integrated door lock

IP65 EV Distribution Board



Reference No.	Description	Ways
EKDB26-5P-AOS-B32	2P 32A 30mA B Curve Type A RCBO + 1PN T2 40kA SPD5, IP65, Dark Gray	5
EKDB26-5P-AOS-B40	2P 40A 30mA B Curve Type A RCBO + 1PN T2 40kA SPD, IP65, Dark Gray	5
EKDB26-5P-BDS-B40	2P 63A 30mA Type B RCD + 1P 40A B Curve MCB + 1PN T2 40kA SPD, IP65, Dark Gray	5

The table only includes our standard models. Customization for other configuration requirements is also available.

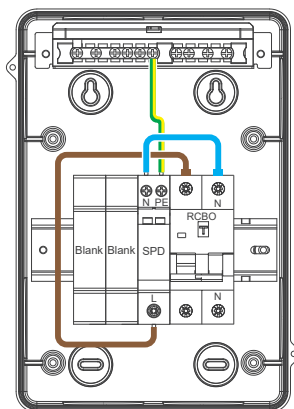
IP20 EV Distribution Board



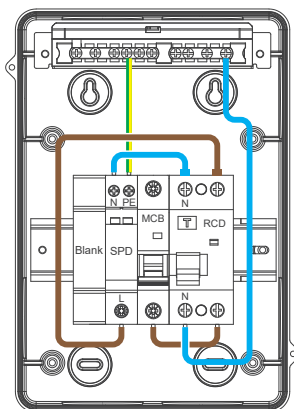
Reference No.	Description	Ways
EKDB16S4L-AOS-B32	2P 32A 30mA B Curve Type A RCBO + 1PN T2 40kA SPD5, IP20, White	4
EKDB16S4L-AOS-B40	2P 40A 30mA B Curve Type A RCBO + 1PN T2 40kA SPD, IP20, White	4
EKDB16S4L-BDS-B40	2P 63A 30mA Type B RCD + 1P 40A B Curve MCB + 1PN T2 40kA SPD, IP20, White	4

The table only includes our standard models. Customization for other configuration requirements is also available.

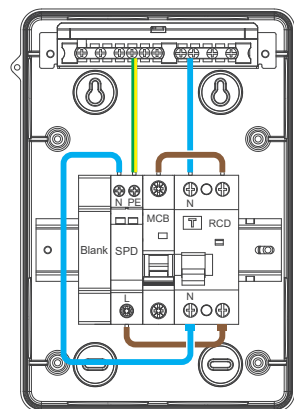
Wiring Diagram



From top to bottom
(RCBO+SPD)

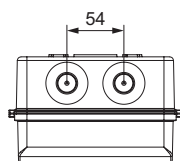
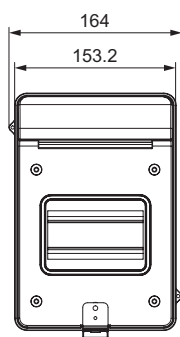


From top to top
(RCD+MCB+SPD)

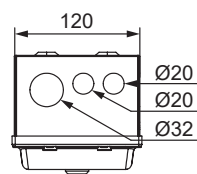
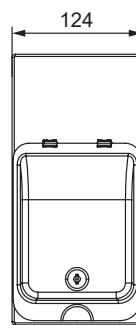
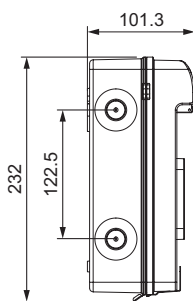


From bottom to bottom
(RCD+MCB+SPD)

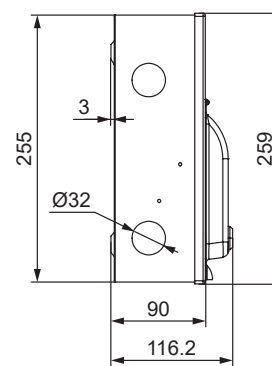
Dimension (mm)



EKD26-5P



EKDB16S4L









Technical Data

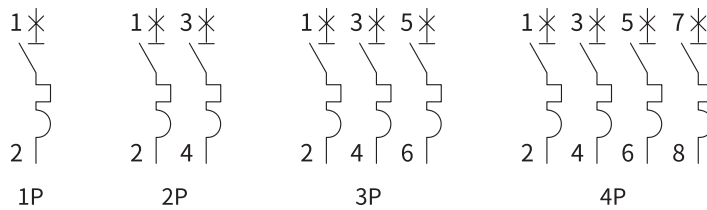
Standard	IEC/EN60898-1
Protection	Overcurrent and short circuit
Type of trip	Thermo-magnetic
No. of poles	1P, 2P, 3P, 4P
Rated currents I _n	1, 2, 3, 4, 5, 6, 10, 16, 20, 25, 32, 40, 50, 63A
Rated voltage U _e	240/415V~
Rated frequency	50/60Hz
Rated breaking capacity	6,000A
Energy limiting class	3
Rated impulse withstand voltage (1.2/50) U _{imp}	4,000V
Dielectric test voltage at Ind. Freq. for 1 min	2kV
Thermal release characteristic	(1.13-1.45)×I _n
Magnetic release characteristic	B: (3-5)×I _n , C: (5-10)×I _n , D: (10-20)×I _n
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

Product Selection Form

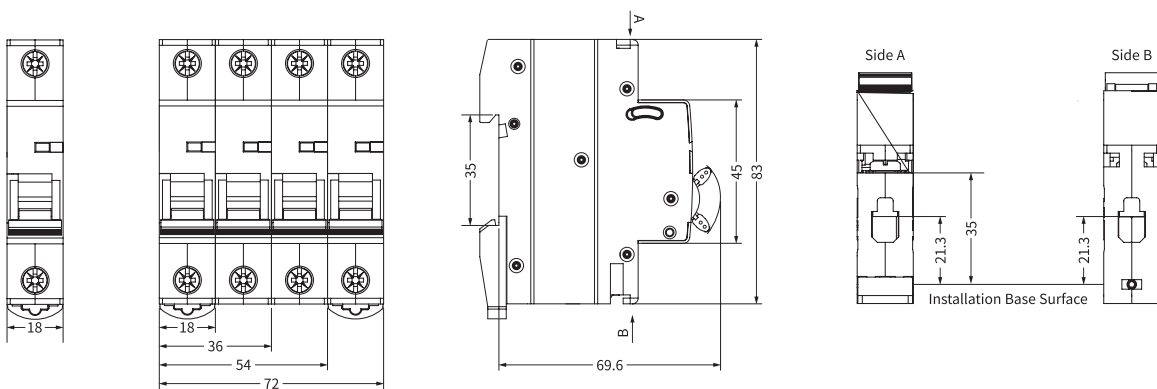
MCB EKM12-63 6kA				
Poles	Rated Current (A)	B Curve	C Curve	D Curve
 <p>1P</p>	1A	EKM12-63-1B01	EKM12-63-1C01	EKM12-63-1D01
	2A	EKM12-63-1B02	EKM12-63-1C02	EKM12-63-1D02
	3A	EKM12-63-1B03	EKM12-63-1C03	EKM12-63-1D03
	4A	EKM12-63-1B04	EKM12-63-1C04	EKM12-63-1D04
	5A	EKM12-63-1B05	EKM12-63-1C05	EKM12-63-1D05
	6A	EKM12-63-1B06	EKM12-63-1C06	EKM12-63-1D06
	10A	EKM12-63-1B10	EKM12-63-1C10	EKM12-63-1D10
	16A	EKM12-63-1B16	EKM12-63-1C16	EKM12-63-1D16
	20A	EKM12-63-1B20	EKM12-63-1C20	EKM12-63-1D20
	25A	EKM12-63-1B25	EKM12-63-1C25	EKM12-63-1D25
	32A	EKM12-63-1B32	EKM12-63-1C32	EKM12-63-1D32
	40A	EKM12-63-1B40	EKM12-63-1C40	EKM12-63-1D40
	50A	EKM12-63-1B50	EKM12-63-1C50	EKM12-63-1D50
	63A	EKM12-63-1B63	EKM12-63-1C63	EKM12-63-1D63
	 <p>2P</p>	1A	EKM12-63-2B01	EKM12-63-2C02
2A		EKM12-63-2B02	EKM12-63-2C03	EKM12-63-2D02
3A		EKM12-63-2B03	EKM12-63-2C04	EKM12-63-2D03
4A		EKM12-63-2B04	EKM12-63-2C05	EKM12-63-2D04
5A		EKM12-63-2B05	EKM12-63-2C06	EKM12-63-2D05
6A		EKM12-63-2B06	EKM12-63-2C08	EKM12-63-2D06
10A		EKM12-63-2B10	EKM12-63-2C13	EKM12-63-2D10
16A		EKM12-63-2B16	EKM12-63-2C20	EKM12-63-2D16
20A		EKM12-63-2B20	EKM12-63-2C25	EKM12-63-2D20
25A		EKM12-63-2B25	EKM12-63-2C32	EKM12-63-2D25
32A		EKM12-63-2B32	EKM12-63-2C40	EKM12-63-2D32
40A		EKM12-63-2B40	EKM12-63-2C50	EKM12-63-2D40
50A		EKM12-63-2B50	EKM12-63-2C63	EKM12-63-2D50
63A		EKM12-63-2B63	EKM3-63-2C63	EKM12-63-2D63
 <p>3P</p>		1A	EKM12-63-3B01	EKM12-63-3C01
	2A	EKM12-63-3B02	EKM12-63-3C02	EKM12-63-3D02
	3A	EKM12-63-3B03	EKM12-63-3C03	EKM12-63-3D03
	4A	EKM12-63-3B04	EKM12-63-3C04	EKM12-63-3D04
	5A	EKM12-63-3B05	EKM12-63-3C05	EKM12-63-3D05
	6A	EKM12-63-3B06	EKM12-63-3C06	EKM12-63-3D06
	10A	EKM12-63-3B10	EKM12-63-3C10	EKM12-63-3D10
	16A	EKM12-63-3B16	EKM12-63-3C16	EKM12-63-3D16
	20A	EKM12-63-3B20	EKM12-63-3C20	EKM12-63-3D20
	25A	EKM12-63-3B25	EKM12-63-3C25	EKM12-63-3D25
	32A	EKM12-63-3B32	EKM12-63-3C32	EKM12-63-3D32
	40A	EKM12-63-3B40	EKM12-63-3C40	EKM12-63-3D40
	50A	EKM12-63-3B50	EKM12-63-3C50	EKM12-63-3D50
	63A	EKM12-63-3B63	EKM12-63-3C63	EKM12-63-3D63

Poles	Rated Current (A)	B Curve	C Curve	D Curve
 <p>4P</p>	1A	EKM12-63-4B01	EKM12-63-4C01	EKM12-63-4D01
	2A	EKM12-63-4B02	EKM12-63-4C02	EKM12-63-4D02
	3A	EKM12-63-4B03	EKM12-63-4C03	EKM12-63-4D03
	4A	EKM12-63-4B04	EKM12-63-4C04	EKM12-63-4D04
	5A	EKM12-63-4B05	EKM12-63-4C05	EKM12-63-4D05
	6A	EKM12-63-4B06	EKM12-63-4C06	EKM12-63-4D06
	10A	EKM12-63-4B10	EKM12-63-4C10	EKM12-63-4D10
	16A	EKM12-63-4B16	EKM12-63-4C16	EKM12-63-4D16
	20A	EKM12-63-4B20	EKM12-63-4C20	EKM12-63-4D20
	25A	EKM12-63-4B25	EKM12-63-4C25	EKM12-63-4D25
	32A	EKM12-63-4B32	EKM12-63-4C32	EKM12-63-4D32
	40A	EKM12-63-4B40	EKM12-63-4C40	EKM12-63-4D40
	50A	EKM12-63-4B50	EKM12-63-4C50	EKM12-63-4D50
	63A	EKM12-63-4B63	EKM12-63-4C63	EKM12-63-4D63

Circuit Diagram

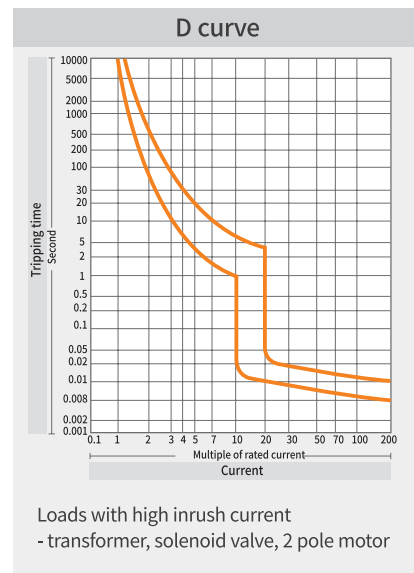
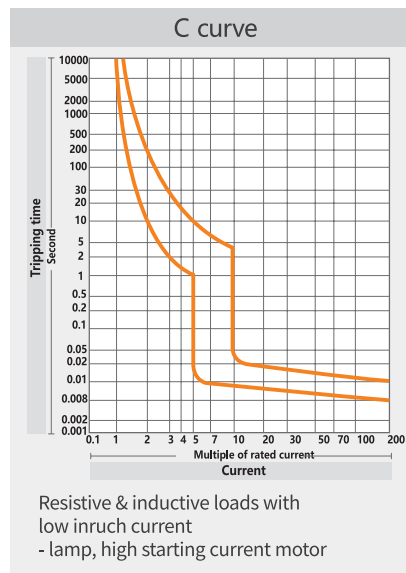
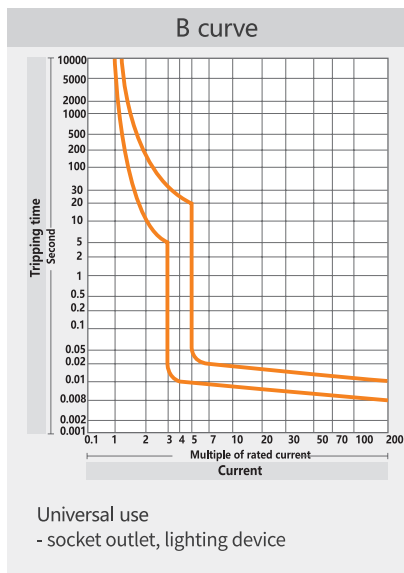


Dimension (mm)



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	1-63A	1.13×In		≤ 1h		3×In		≥ 0.1
			1.45×In		< 1h		5×In	< 0.1
C	1-63A	1.13×In		≤ 1h		5×In		≥ 0.1
			1.45×In		< 1h		10×In	< 0.1
D	1-63A	1.13×In		≤ 1h		10×In		≥ 0.1
			1.45×In		< 1h		20×In	< 0.1



Temperature Derating Table



Rated Current (A)	Correction factor for ambient temperature											
	-40°C	-30°C	-20°C	-10°C	0°C	10°C	20°C	30°C	40°C	50°C	60°C	70°C
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





Technical Data

Standard	IEC/EN61008-1
Protection	Ground fault
Type of trip	Electro-magnetic
Type of protection (electric leakage)	AC, A, A-G / A-SI, A-S
No. of poles	2P(1P+N), 4P(3P+N), N Pole on right
Rated currents (In)	16, 25, 32, 40, 63, 80, 100A
Rated sensitivity currents IΔn	10, 30, 100, 300mA (10mA only for In=16-25A)
Residual current off-time under IΔn	A/AC ≤ 300ms; A-G / A-SI: 10-300ms; A-S:130-500ms
Rated residual making and breaking capacity(IΔm)	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

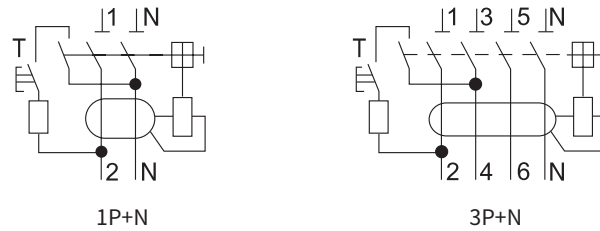
Product Selection Form

RCCB EKL16-100 6kA					
Poles	Type	Rated Current (A)	Sensitivity		
			30mA	100mA	300mA
 <p>1P+N</p>	AC	16A	EKL16-100-1N1630	EKL16-100-1N16100	EKL16-100-1N16300
		25A	EKL16-100-1N2530	EKL16-100-1N25100	EKL16-100-1N25300
		32A	EKL16-100-1N3230	EKL16-100-1N32100	EKL16-100-1N32300
		40A	EKL16-100-1N4030	EKL16-100-1N40100	EKL16-100-1N40300
		63A	EKL16-100-1N6330	EKL16-100-1N63100	EKL16-100-1N63300
		80A	EKL16-100-1N8030	EKL16-100-1N80100	EKL16-100-1N80300
		100A	EKL16-100-1N10030	EKL16-100-1N100100	EKL16-100-1N100300
	A	16A	EKL16-100-1N1630A	EKL16-100-1N16100A	EKL16-100-1N16300A
		25A	EKL16-100-1N2530A	EKL16-100-1N25100A	EKL16-100-1N25300A
		32A	EKL16-100-1N3230A	EKL16-100-1N32100A	EKL16-100-1N32300A
		40A	EKL16-100-1N4030A	EKL16-100-1N40100A	EKL16-100-1N40300A
		63A	EKL16-100-1N6330A	EKL16-100-1N63100A	EKL16-100-1N63300A
		80A	EKL16-100-1N8030A	EKL16-100-1N80100A	EKL16-100-1N80300A
		100A	EKL16-100-1N10030A	EKL16-100-1N100100A	EKL16-100-1N100300A
 <p>3P+N</p>	AC	16A	EKL16-100-3N1630	EKL16-100-3N16100	EKL16-100-3N16300
		25A	EKL16-100-3N2530	EKL16-100-3N25100	EKL16-100-3N25300
		32A	EKL16-100-3N3230	EKL16-100-3N32100	EKL16-100-3N32300
		40A	EKL16-100-3N4030	EKL16-100-3N40100	EKL16-100-3N40300
		63A	EKL16-100-3N6330	EKL16-100-3N63100	EKL16-100-3N63300
		80A	EKL16-100-3N8030	EKL16-100-3N80100	EKL16-100-3N80300
		100A	EKL16-100-3N10030	EKL16-100-3N100100	EKL16-100-3N100300
	A	16A	EKL16-100-3N1630A	EKL16-100-3N16100A	EKL16-100-3N16300A
		25A	EKL16-100-3N2530A	EKL16-100-3N25100A	EKL16-100-3N25300A
		32A	EKL16-100-3N3230A	EKL16-100-3N32100A	EKL16-100-3N32300A
		40A	EKL16-100-3N4030A	EKL16-100-3N40100A	EKL16-100-3N40300A
		63A	EKL16-100-3N6330A	EKL16-100-3N63100A	EKL16-100-3N63300A
		80A	EKL16-100-3N8030A	EKL16-100-3N80100A	EKL16-100-3N80300A
		100A	EKL16-100-3N10030A	EKL16-100-3N100100A	EKL16-100-3N100300A

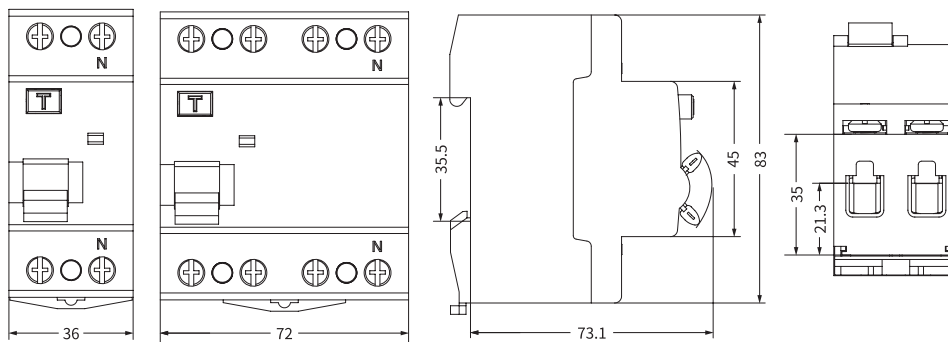
RCCB EKL16-100H 10kA					
Poles	Type	Rated Current (A)	Sensitivity		
			30mA	100mA	300mA
 <p>1P+N</p>	AC	16A	EKL16-100H-1N1630	EKL16-100H-1N16100	EKL16-100H-1N16300
		25A	EKL16-100H-1N2530	EKL16-100H-1N25100	EKL16-100H-1N25300
		32A	EKL16-100H-1N3230	EKL16-100H-1N32100	EKL16-100H-1N32300
		40A	EKL16-100H-1N4030	EKL16-100H-1N40100	EKL16-100H-1N40300
		63A	EKL16-100H-1N6330	EKL16-100H-1N63100	EKL16-100H-1N63300
		80A	EKL16-100H-1N8030	EKL16-100H-1N80100	EKL16-100H-1N80300
		100A	EKL16-100H-1N10030	EKL16-100H-1N100100	EKL16-100H-1N100300
	A	16A	EKL16-100H-1N1630A	EKL16-100H-1N16100A	EKL16-100H-1N16300A
		25A	EKL16-100H-1N2530A	EKL16-100H-1N25100A	EKL16-100H-1N25300A
		32A	EKL16-100H-1N3230A	EKL16-100H-1N32100A	EKL16-100H-1N32300A
		40A	EKL16-100H-1N4030A	EKL16-100H-1N40100A	EKL16-100H-1N40300A
		63A	EKL16-100H-1N6330A	EKL16-100H-1N63100A	EKL16-100H-1N63300A
		80A	EKL16-100H-1N8030A	EKL16-100H-1N80100A	EKL16-100H-1N80300A
		100A	EKL16-100H-1N10030A	EKL16-100H-1N100100A	EKL16-100H-1N100300A

Poles	Type	Rated Current (A)	Sensitivity		
			30mA	100mA	300mA
 <p>3P+N</p>	AC	16A	EKL16-100H-3N1630	EKL16-100H-3N16100	EKL16-100H-3N16300
		25A	EKL16-100H-3N2530	EKL16-100H-3N25100	EKL16-100H-3N25300
		32A	EKL16-100H-3N3230	EKL16-100H-3N32100	EKL16-100H-3N32300
		40A	EKL16-100H-3N4030	EKL16-100H-3N40100	EKL16-100H-3N40300
		63A	EKL16-100H-3N6330	EKL16-100H-3N63100	EKL16-100H-3N63300
		80A	EKL16-100H-3N8030	EKL16-100H-3N80100	EKL16-100H-3N80300
		100A	EKL16-100H-3N10030	EKL16-100H-3N100100	EKL16-100H-3N100300
	A	16A	EKL16-100H-3N1630A	EKL16-100H-3N16100A	EKL16-100H-3N16300A
		25A	EKL16-100H-3N2530A	EKL16-100H-3N25100A	EKL16-100H-3N25300A
		32A	EKL16-100H-3N3230A	EKL16-100H-3N32100A	EKL16-100H-3N32300A
		40A	EKL16-100H-3N4030A	EKL16-100H-3N40100A	EKL16-100H-3N40300A
		63A	EKL16-100H-3N6330A	EKL16-100H-3N63100A	EKL16-100H-3N63300A
		80A	EKL16-100H-3N8030A	EKL16-100H-3N80100A	EKL16-100H-3N80300A
		100A	EKL16-100H-3N10030A	EKL16-100H-3N100100A	EKL16-100H-3N100300A

Circuit Diagram



Dimension (mm)








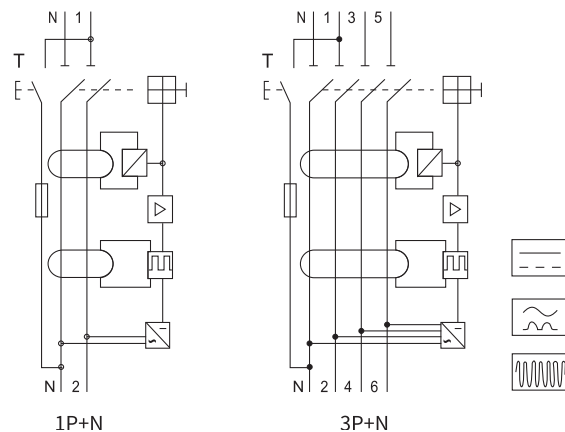
Technical Data

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 voltage (Ue)	2P(1P+N):110/230/240V~, 4P(3P+N):240/400/415V~
Rated currents (In)	16,25,40,63,80,100A
Rated sensitivity currents (I Δ n)	30,100,300mA
Residual current off-time under (I Δ n)	$\leq 0.1s$
Rated residual making and breaking capacity (I Δ m)	500A(In \leq 50A), 10In(In>50A)
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

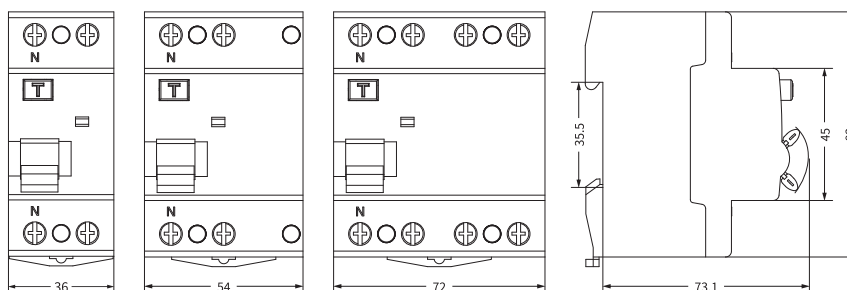
Product Selection Form

Type B 	Rated Current (A)	Sensitivity		
		30mA	100mA	300mA
 1P+N	16A	EKL6-100B-1N1630	EKL6-100B-1N16100	EKL6-100B-1N16300
	25A	EKL6-100B-1N2530	EKL6-100B-1N25100	EKL6-100B-1N25300
	40A	EKL6-100B-1N4030	EKL6-100B-1N40100	EKL6-100B-1N40300
	63A	EKL6-100B-1N6330	EKL6-100B-1N63100	EKL6-100B-1N63300
	80A	EKL6-100B-1N8030	EKL6-100B-1N80100	EKL6-100B-1N80300
	100A	EKL6-100B-1N10030	EKL6-100B-1N100100	EKL6-100B-1N100300
 3P+N	16A	EKL6-100B-3N1630	EKL6-100B-3N16100	EKL6-100B-3N16300
	25A	EKL6-100B-3N2530	EKL6-100B-3N25100	EKL6-100B-3N25300
	40A	EKL6-100B-3N4030	EKL6-100B-3N40100	EKL6-100B-3N40300
	63A	EKL6-100B-3N6330	EKL6-100B-3N63100	EKL6-100B-3N63300
	80A	EKL6-100B-3N8030	EKL6-100B-3N80100	EKL6-100B-3N80300
	100A	EKL6-100B-3N10030	EKL6-100B-3N100100	EKL6-100B-3N100300

Circuit Diagram



Dimension (mm)



Life

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

Residual Current

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

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

Detectable Wave Form

Class	Description
AC	Tripping is ensured for slowly increasing sinusoidal AC residual currents.
A	Tripping is ensured for sinusoidal AC residual currents and for pulsed DC residual currents, whether applied suddenly or increasing slowly.
B	Tripping is ensured for sinusoidal AC residual currents pulsed DC residual currents, alternating residual sinusoidal currents up to 1000Hz, pulsating direct residual currents and for smooth direct residual currents, whether applied suddenly or increasing slowly.
S, G/SI	Tripping is ensured not only for sinusoidal AC residual currents but also for pulsed DC residual currents whether applied suddenly or increasing slowly. S, G/SI type with filters against spurious tripping caused by harmonics and transient surges. With the impact of 8/20us surge 3000A, this high immunity RCCB will still be in stable status.

Tripping Sensitivity

10mA: Precision instrument leakage protection and bathroom use.

30mA: Additional protection against direct contact.

100mA: Co-ordinated with the earth system according to the formula $I\Delta n < 50/R$, to provide protection against indirect contacts.

300mA: Protection against indirect contacts, as well as fire hazard.

Tripping time


Instantaneous	It ensures instantaneous tripping (without time-delay).
Short time delay <input type="checkbox"/> G/SI	It ensures any tripping at least 10ms.
Selective <input type="checkbox"/> S	It ensures total discrimination with a nonselective RCD placed downstream.




Technical Data

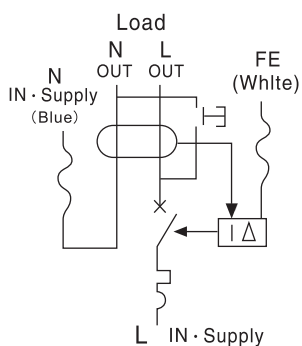
Standard	IEC/EN61009-1
Protection	Ground fault, Overcurrent and short circuit, Over-voltage(selectable)
Type of trip	Ground fault : Electronic Overload and short circuit :Thermo-magnetic
Type of protection (electric leakage)	AC,A
No.of poles	1P+N 1module , N line non-disconnected
Rated voltage (Ue)	230/240V~
Rated currents (In)	6,10,16,20,25,32,40A
Rated sensitivity currents (I Δ n)	10,30,100,300mA
Residual current off-time under (I Δ n)	≤ 0.1s
Rated residual making and breaking capacity(I Δ m)	500A(In ≤ 50A), 10In(In>50A)
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

Product Selection Form

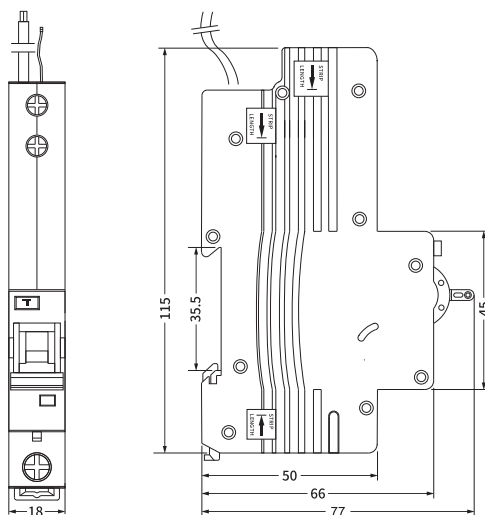
RCBO EKL2-40 (B Curve)						
Poles	Type	Rated Current (A)	Sensitivity			
			10mA	30mA	100mA	300mA
	AC	6A	EKL2-40-1NB0610	EKL2-40-1NB0630	EKL2-40-1NB06100	EKL2-40-1NB06300
		10A	EKL2-40-1NB1010	EKL2-40-1NB1030	EKL2-40-1NB10100	EKL2-40-1NB10300
		16A	EKL2-40-1NB1610	EKL2-40-1NB1630	EKL2-40-1NB16100	EKL2-40-1NB16300
		20A	EKL2-40-1NB2010	EKL2-40-1NB2030	EKL2-40-1NB20100	EKL2-40-1NB20300
		25A	EKL2-40-1NB2510	EKL2-40-1NB2530	EKL2-40-1NB25100	EKL2-40-1NB25300
		32A	EKL2-40-1NB3210	EKL2-40-1NB3230	EKL2-40-1NB32100	EKL2-40-1NB32300
		40A	EKL2-40-1NB4010	EKL2-40-1NB4030	EKL2-40-1NB40100	EKL2-40-1NB40300
	A	6A	EKL2-40-1NB0610A	EKL2-40-1NB0630A	EKL2-40-1NB06100A	EKL2-40-1NB06300A
		10A	EKL2-40-1NB1010A	EKL2-40-1NB1030A	EKL2-40-1NB10100A	EKL2-40-1NB10300A
		16A	EKL2-40-1NB1610A	EKL2-40-1NB1630A	EKL2-40-1NB16100A	EKL2-40-1NB16300A
		20A	EKL2-40-1NB2010A	EKL2-40-1NB2030A	EKL2-40-1NB20100A	EKL2-40-1NB20300A
		25A	EKL2-40-1NB2510A	EKL2-40-1NB2530A	EKL2-40-1NB25100A	EKL2-40-1NB25300A
		32A	EKL2-40-1NB3210A	EKL2-40-1NB3230A	EKL2-40-1NB32100A	EKL2-40-1NB32300A
		40A	EKL2-40-1NB4010A	EKL2-40-1NB4030A	EKL2-40-1NB40100A	EKL2-40-1NB40300A

RCBO EKL2-40 (C Curve)						
Poles	Type	Rated Current (A)	Sensitivity			
			10mA	30mA	100mA	300mA
	AC	6A	EKL2-40-1NC0610	EKL2-40-1NC0630	EKL2-40-1NC06100	EKL2-40-1NC06300
		10A	EKL2-40-1NC1010	EKL2-40-1NC1030	EKL2-40-1NC10100	EKL2-40-1NC10300
		16A	EKL2-40-1NC1610	EKL2-40-1NC1630	EKL2-40-1NC16100	EKL2-40-1NC16300
		20A	EKL2-40-1NC2010	EKL2-40-1NC2030	EKL2-40-1NC20100	EKL2-40-1NC20300
		25A	EKL2-40-1NC2510	EKL2-40-1NC2530	EKL2-40-1NC25100	EKL2-40-1NC25300
		32A	EKL2-40-1NC3210	EKL2-40-1NC3230	EKL2-40-1NC32100	EKL2-40-1NC32300
		40A	EKL2-40-1NC4010	EKL2-40-1NC4030	EKL2-40-1NC40100	EKL2-40-1NC40300
	A	6A	EKL2-40-1NC0610A	EKL2-40-1NC0630A	EKL2-40-1NC06100A	EKL2-40-1NC06300A
		10A	EKL2-40-1NC1010A	EKL2-40-1NC1030A	EKL2-40-1NC10100A	EKL2-40-1NC10300A
		16A	EKL2-40-1NC1610A	EKL2-40-1NC1630A	EKL2-40-1NC16100A	EKL2-40-1NC16300A
		20A	EKL2-40-1NC2010A	EKL2-40-1NC2030A	EKL2-40-1NC20100A	EKL2-40-1NC20300A
		25A	EKL2-40-1NC2510A	EKL2-40-1NC2530A	EKL2-40-1NC25100A	EKL2-40-1NC25300A
		32A	EKL2-40-1NC3210A	EKL2-40-1NC3230A	EKL2-40-1NC32100A	EKL2-40-1NC32300A
		40A	EKL2-40-1NC4010A	EKL2-40-1NC4030A	EKL2-40-1NC40100A	EKL2-40-1NC40300A

Circuit Diagram



Dimension (mm)







Technical Data

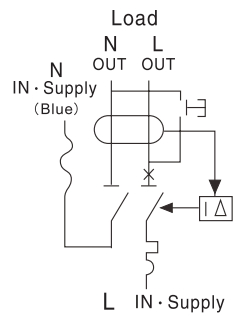
Standard	IEC/EN61009-1
Protection	Ground fault, Overcurrent and short circuit, Over-voltage(selectable)
Type of trip	Ground fault: Electronic
	Overload and short circuit: Thermo-magnetic
Type of protection (electric leakage)	AC, A
No.of poles	1P+N 1module, N line with disconnected
Rated currents(In)	6, 10, 16, 20, 25, 32, 40A
Rated sensitivity currents IΔn	10, 30, 100, 300mA
Residual current off-time under IΔn	≤ 0.1s
Reted residual making and breaking capacity (IΔm)	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)×In
Magnetic release characteristic	B: (3-5)×In, C: (5-10)×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 bottom

Product Selection Form

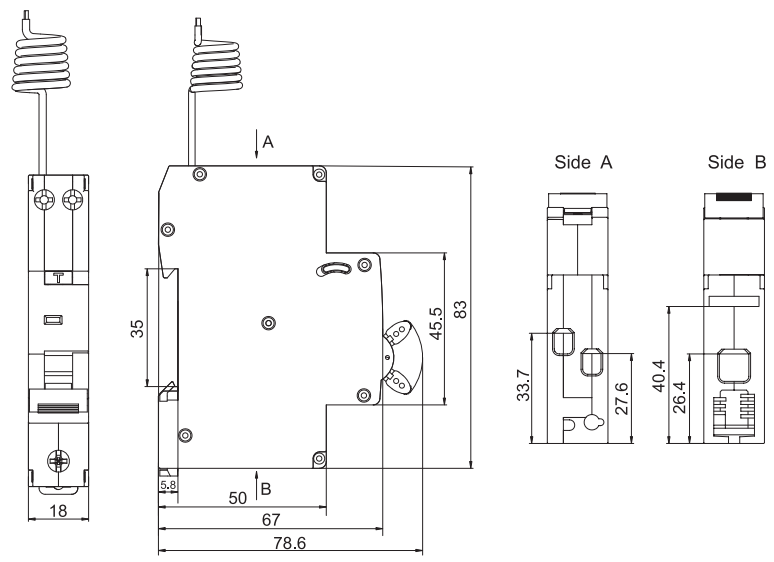
RCBO EKL17-40 (B Curve)						
Poles	Type	Rated Current (A)	Sensitivity			
			10mA	30mA	100mA	300mA
	AC	6A	EKL17-40-1NB0610	EKL17-40-1NB0630	EKL17-40-1NB06100	EKL17-40-1NB06300
		10A	EKL17-40-1NB1010	EKL17-40-1NB1030	EKL17-40-1NB10100	EKL17-40-1NB10300
		16A	EKL17-40-1NB1610	EKL17-40-1NB1630	EKL17-40-1NB16100	EKL17-40-1NB16300
		20A	EKL17-40-1NB2010	EKL17-40-1NB2030	EKL17-40-1NB20100	EKL17-40-1NB20300
		25A	EKL17-40-1NB2510	EKL17-40-1NB2530	EKL17-40-1NB25100	EKL17-40-1NB25300
		32A	EKL17-40-1NB3210	EKL17-40-1NB3230	EKL17-40-1NB32100	EKL17-40-1NB32300
		40A	EKL17-40-1NB4010	EKL17-40-1NB4030	EKL17-40-1NB40100	EKL17-40-1NB40300
	A	6A	EKL17-40-1NB0610A	EKL17-40-1NB0630A	EKL17-40-1NB06100A	EKL17-40-1NB06300A
		10A	EKL17-40-1NB1010A	EKL17-40-1NB1030A	EKL17-40-1NB10100A	EKL17-40-1NB10300A
		16A	EKL17-40-1NB1610A	EKL17-40-1NB1630A	EKL17-40-1NB16100A	EKL17-40-1NB16300A
		20A	EKL17-40-1NB2010A	EKL17-40-1NB2030A	EKL17-40-1NB20100A	EKL17-40-1NB20300A
		25A	EKL17-40-1NB2510A	EKL17-40-1NB2530A	EKL17-40-1NB25100A	EKL17-40-1NB25300A
		32A	EKL17-40-1NB3210A	EKL17-40-1NB3230A	EKL17-40-1NB32100A	EKL17-40-1NB32300A
		40A	EKL17-40-1NB4010A	EKL17-40-1NB4030A	EKL17-40-1NB40100A	EKL17-40-1NB40300A

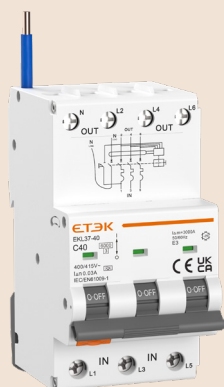
RCBO EKL17-40 (C Curve)						
Poles	Type	Rated Current (A)	Sensitivity			
			10mA	30mA	100mA	300mA
	AC	6A	EKL17-40-1NC0610	EKL17-40-1NC0630	EKL17-40-1NC06100	EKL17-40-1NC06300
		10A	EKL17-40-1NC1010	EKL17-40-1NC1030	EKL17-40-1NC10100	EKL17-40-1NC10300
		16A	EKL17-40-1NC1610	EKL17-40-1NC1630	EKL17-40-1NC16100	EKL17-40-1NC16300
		20A	EKL17-40-1NC2010	EKL17-40-1NC2030	EKL17-40-1NC20100	EKL17-40-1NC20300
		25A	EKL17-40-1NC2510	EKL17-40-1NC2530	EKL17-40-1NC25100	EKL17-40-1NC25300
		32A	EKL17-40-1NC3210	EKL17-40-1NC3230	EKL17-40-1NC32100	EKL17-40-1NC32300
		40A	EKL17-40-1NC4010	EKL17-40-1NC4030	EKL17-40-1NC40100	EKL17-40-1NC40300
	A	6A	EKL17-40-1NC0610A	EKL17-40-1NC0630A	EKL17-40-1NC06100A	EKL17-40-1NC06300A
		10A	EKL17-40-1NC1010A	EKL17-40-1NC1030A	EKL17-40-1NC10100A	EKL17-40-1NC10300A
		16A	EKL17-40-1NC1610A	EKL17-40-1NC1630A	EKL17-40-1NC16100A	EKL17-40-1NC16300A
		20A	EKL17-40-1NC2010A	EKL17-40-1NC2030A	EKL17-40-1NC20100A	EKL17-40-1NC20300A
		25A	EKL17-40-1NC2510A	EKL17-40-1NC2530A	EKL17-40-1NC25100A	EKL17-40-1NC25300A
		32A	EKL17-40-1NC3210A	EKL17-40-1NC3230A	EKL17-40-1NC32100A	EKL17-40-1NC32300A
		40A	EKL17-40-1NC4010A	EKL17-40-1NC4030A	EKL17-40-1NC40100A	EKL17-40-1NC40300A

Circuit Diagram



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	3P+N, compact 3 modules 54mm width
Rated currents(In)	6, 10, 16, 20, 25, 32, 40A
Rated sensitivity currents IΔn	10, 30, 100, 300mA
Residual current off-time under IΔn	≤ 0.1s
Reted residual making and breaking capacity (IΔm)	500A(In ≤ 50A), 10In(In>50A)
Rated voltage (Ue)	400/415V~
Rated frequency	50/60Hz
Rated breaking capacity	EKL37-40: 6,000A; EKL37-40H: 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)×In
Magnetic release characteristic	B: (3-5)×In, C: (5-10)×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/Fork-type busbar
Max. terminal size for cable	16mm ²
Max. tightening torque	2.5N.m
Installation	Mounting on 35mm DIN rail
Connection	From bottom

Product Selection Form

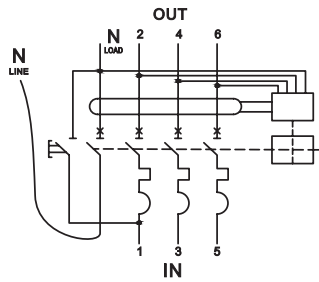
RCBO EKL37-40 (B Curve)						
Poles	Type	Rated Current (A)	Sensitivity			
			10mA	30mA	100mA	300mA
	AC	6A	EKL37-40-1NB0610	EKL37-40-1NB0630	EKL37-40-1NB06100	EKL37-40-1NB06300
		10A	EKL37-40-1NB1010	EKL37-40-1NB1030	EKL37-40-1NB10100	EKL37-40-1NB10300
		16A	EKL37-40-1NB1610	EKL37-40-1NB1630	EKL37-40-1NB16100	EKL37-40-1NB16300
		20A	EKL37-40-1NB2010	EKL37-40-1NB2030	EKL37-40-1NB20100	EKL37-40-1NB20300
		25A	EKL37-40-1NB2510	EKL37-40-1NB2530	EKL37-40-1NB25100	EKL37-40-1NB25300
		32A	EKL37-40-1NB3210	EKL37-40-1NB3230	EKL37-40-1NB32100	EKL37-40-1NB32300
		40A	EKL37-40-1NB4010	EKL37-40-1NB4030	EKL37-40-1NB40100	EKL37-40-1NB40300
	A	6A	EKL37-40-1NB0610A	EKL37-40-1NB0630A	EKL37-40-1NB06100A	EKL37-40-1NB06300A
		10A	EKL37-40-1NB1010A	EKL37-40-1NB1030A	EKL37-40-1NB10100A	EKL37-40-1NB10300A
		16A	EKL37-40-1NB1610A	EKL37-40-1NB1630A	EKL37-40-1NB16100A	EKL37-40-1NB16300A
		20A	EKL37-40-1NB2010A	EKL37-40-1NB2030A	EKL37-40-1NB20100A	EKL37-40-1NB20300A
		25A	EKL37-40-1NB2510A	EKL37-40-1NB2530A	EKL37-40-1NB25100A	EKL37-40-1NB25300A
		32A	EKL37-40-1NB3210A	EKL37-40-1NB3230A	EKL37-40-1NB32100A	EKL37-40-1NB32300A
		40A	EKL37-40-1NB4010A	EKL37-40-1NB4030A	EKL37-40-1NB40100A	EKL37-40-1NB40300A

RCBO EKL37-40 (C Curve)						
Poles	Type	Rated Current (A)	Sensitivity			
			10mA	30mA	100mA	300mA
	AC	6A	EKL37-40-1NC0610	EKL37-40-1NC0630	EKL37-40-1NC06100	EKL37-40-1NC06300
		10A	EKL37-40-1NC1010	EKL37-40-1NC1030	EKL37-40-1NC10100	EKL37-40-1NC10300
		16A	EKL37-40-1NC1610	EKL37-40-1NC1630	EKL37-40-1NC16100	EKL37-40-1NC16300
		20A	EKL37-40-1NC2010	EKL37-40-1NC2030	EKL37-40-1NC20100	EKL37-40-1NC20300
		25A	EKL37-40-1NC2510	EKL37-40-1NC2530	EKL37-40-1NC25100	EKL37-40-1NC25300
		32A	EKL37-40-1NC3210	EKL37-40-1NC3230	EKL37-40-1NC32100	EKL37-40-1NC32300
		40A	EKL37-40-1NC4010	EKL37-40-1NC4030	EKL37-40-1NC40100	EKL37-40-1NC40300
	A	6A	EKL37-40-1NC0610A	EKL37-40-1NC0630A	EKL37-40-1NC06100A	EKL37-40-1NC06300A
		10A	EKL37-40-1NC1010A	EKL37-40-1NC1030A	EKL37-40-1NC10100A	EKL37-40-1NC10300A
		16A	EKL37-40-1NC1610A	EKL37-40-1NC1630A	EKL37-40-1NC16100A	EKL37-40-1NC16300A
		20A	EKL37-40-1NC2010A	EKL37-40-1NC2030A	EKL37-40-1NC20100A	EKL37-40-1NC20300A
		25A	EKL37-40-1NC2510A	EKL37-40-1NC2530A	EKL37-40-1NC25100A	EKL37-40-1NC25300A
		32A	EKL37-40-1NC3210A	EKL37-40-1NC3230A	EKL37-40-1NC32100A	EKL37-40-1NC32300A
		40A	EKL37-40-1NC4010A	EKL37-40-1NC4030A	EKL37-40-1NC40100A	EKL37-40-1NC40300A

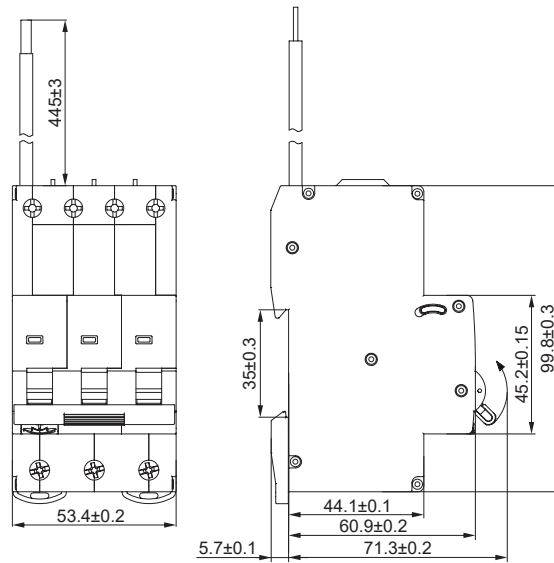
RCBO EKL37-40H (B Curve)						
Poles	Type	Rated Current (A)	Sensitivity			
			10mA	30mA	100mA	300mA
	AC	6A	EKL37-40H-1NB0610	EKL37-40H-1NB0630	EKL37-40H-1NB06100	EKL37-40H-1NB06300
		10A	EKL37-40H-1NB1010	EKL37-40H-1NB1030	EKL37-40H-1NB10100	EKL37-40H-1NB10300
		16A	EKL37-40H-1NB1610	EKL37-40H-1NB1630	EKL37-40H-1NB16100	EKL37-40H-1NB16300
		20A	EKL37-40H-1NB2010	EKL37-40H-1NB2030	EKL37-40H-1NB20100	EKL37-40H-1NB20300
		25A	EKL37-40H-1NB2510	EKL37-40H-1NB2530	EKL37-40H-1NB25100	EKL37-40H-1NB25300
		32A	EKL37-40H-1NB3210	EKL37-40H-1NB3230	EKL37-40H-1NB32100	EKL37-40H-1NB32300
		40A	EKL37-40H-1NB4010	EKL37-40H-1NB4030	EKL37-40H-1NB40100	EKL37-40H-1NB40300
	A	6A	EKL37-40H-1NB0610A	EKL37-40H-1NB0630A	EKL37-40H-1NB06100A	EKL37-40H-1NB06300A
		10A	EKL37-40H-1NB1010A	EKL37-40H-1NB1030A	EKL37-40H-1NB10100A	EKL37-40H-1NB10300A
		16A	EKL37-40H-1NB1610A	EKL37-40H-1NB1630A	EKL37-40H-1NB16100A	EKL37-40H-1NB16300A
		20A	EKL37-40H-1NB2010A	EKL37-40H-1NB2030A	EKL37-40H-1NB20100A	EKL37-40H-1NB20300A
		25A	EKL37-40H-1NB2510A	EKL37-40H-1NB2530A	EKL37-40H-1NB25100A	EKL37-40H-1NB25300A
		32A	EKL37-40H-1NB3210A	EKL37-40H-1NB3230A	EKL37-40H-1NB32100A	EKL37-40H-1NB32300A
		40A	EKL37-40H-1NB4010A	EKL37-40H-1NB4030A	EKL37-40H-1NB40100A	EKL37-40H-1NB40300A

RCBO EKL37-40H (C Curve)						
Poles	Type	Rated Current (A)	Sensitivity			
			10mA	30mA	100mA	300mA
	AC	6A	EKL37-40H-1NC0610	EKL37-40H-1NC0630	EKL37-40H-1NC06100	EKL37-40H-1NC06300
		10A	EKL37-40H-1NC1010	EKL37-40H-1NC1030	EKL37-40H-1NC10100	EKL37-40H-1NC10300
		16A	EKL37-40H-1NC1610	EKL37-40H-1NC1630	EKL37-40H-1NC16100	EKL37-40H-1NC16300
		20A	EKL37-40H-1NC2010	EKL37-40H-1NC2030	EKL37-40H-1NC20100	EKL37-40H-1NC20300
		25A	EKL37-40H-1NC2510	EKL37-40H-1NC2530	EKL37-40H-1NC25100	EKL37-40H-1NC25300
		32A	EKL37-40H-1NC3210	EKL37-40H-1NC3230	EKL37-40H-1NC32100	EKL37-40H-1NC32300
		40A	EKL37-40H-1NC4010	EKL37-40H-1NC4030	EKL37-40H-1NC40100	EKL37-40H-1NC40300
	A	6A	EKL37-40H-1NC0610A	EKL37-40H-1NC0630A	EKL37-40H-1NC06100A	EKL37-40H-1NC06300A
		10A	EKL37-40H-1NC1010A	EKL37-40H-1NC1030A	EKL37-40H-1NC10100A	EKL37-40H-1NC10300A
		16A	EKL37-40H-1NC1610A	EKL37-40H-1NC1630A	EKL37-40H-1NC16100A	EKL37-40H-1NC16300A
		20A	EKL37-40H-1NC2010A	EKL37-40H-1NC2030A	EKL37-40H-1NC20100A	EKL37-40H-1NC20300A
		25A	EKL37-40H-1NC2510A	EKL37-40H-1NC2530A	EKL37-40H-1NC25100A	EKL37-40H-1NC25300A
		32A	EKL37-40H-1NC3210A	EKL37-40H-1NC3230A	EKL37-40H-1NC32100A	EKL37-40H-1NC32300A
		40A	EKL37-40H-1NC4010A	EKL37-40H-1NC4030A	EKL37-40H-1NC40100A	EKL37-40H-1NC40300A

Circuit Diagram



Dimension (mm)







Technical Data

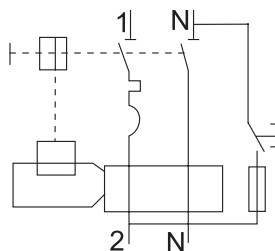
Standard	IEC/EN61009-1
Protection	Ground fault, Overcurrent and short circuit, Over-voltage (selectable)
Type of trip	Ground fault: Electronic
	Overload and short circuit: Thermo-magnetic
Type of protection(electric leakage)	AC, A
No. of poles	1P+N 2module, N line with disconnected
Rated currents(In)	6, 10, 16, 20, 25, 32, 40A, 63A, 80A
Rated sensitivity currents IΔn	30, 100, 300mA
Residual current off-time under IΔn	≤ 0.1s
Rated residual making and breaking capacity (IΔm)	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)×In
Magnetic release characteristic	B: (3-5)×In, C: (5-10)×In
Electrical life	4,000 Cycles
Mechanical life	10,000 Cycles
Contact position indicator	Yes
Ground fault indicator	Yes
Protection degree	1P20
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

Product Selection Form

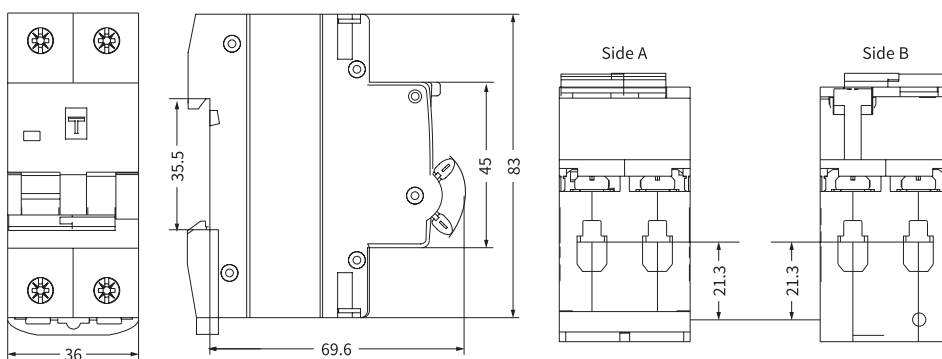
RCBO EKL8-80 6kA (B Curve)					
Poles	Type	Rated Current (A)	Sensitivity		
			30mA	100mA	300mA
	AC	6A	EKL8-80-1NB0630	EKL8-80-1NB06100	EKL8-80-1NB06300
		10A	EKL8-80-1NB1030	EKL8-80-1NB10100	EKL8-80-1NB10300
		16A	EKL8-80-1NB1630	EKL8-80-1NB16100	EKL8-80-1NB16300
		20A	EKL8-80-1NB2030	EKL8-80-1NB20100	EKL8-80-1NB20300
		25A	EKL8-80-1NB2530	EKL8-80-1NB25100	EKL8-80-1NB25300
		32A	EKL8-80-1NB3230	EKL8-80-1NB32100	EKL8-80-1NB32300
		40A	EKL8-80-1NB4030	EKL8-80-1NB40100	EKL8-80-1NB40300
		50A	EKL8-80-1NB5030	EKL8-80-1NB50100	EKL8-80-1NB50300
		63A	EKL8-80-1NB6330	EKL8-80-1NB63100	EKL8-80-1NB63300
	A	6A	EKL8-80-1NB0630A	EKL8-80-1NB06100A	EKL8-80-1NB06300A
		10A	EKL8-80-1NB1030A	EKL8-80-1NB10100A	EKL8-80-1NB10300A
		16A	EKL8-80-1NB1630A	EKL8-80-1NB16100A	EKL8-80-1NB16300A
		20A	EKL8-80-1NB2030A	EKL8-80-1NB20100A	EKL8-80-1NB20300A
		25A	EKL8-80-1NB2530A	EKL8-80-1NB25100A	EKL8-80-1NB25300A
		32A	EKL8-80-1NB3230A	EKL8-80-1NB32100A	EKL8-80-1NB32300A
		40A	EKL8-80-1NB4030A	EKL8-80-1NB40100A	EKL8-80-1NB40300A
		50A	EKL8-80-1NB5030A	EKL8-80-1NB50100A	EKL8-80-1NB50300A
		63A	EKL8-80-1NB6330A	EKL8-80-1NB63100A	EKL8-80-1NB63300A
80A	EKL8-80-1NB8030A	EKL8-80-1NB80100A	EKL8-80-1NB80300A		

RCBO EKL8-80 6kA (C Curve)					
Poles	Type	Rated Current (A)	Sensitivity		
			30mA	100mA	300mA
	AC	6A	EKL8-80-1NC0630	EKL8-80-1NC06100	EKL8-80-1NC06300
		10A	EKL8-80-1NC1030	EKL8-80-1NC10100	EKL8-80-1NC10300
		16A	EKL8-80-1NC1630	EKL8-80-1NC16100	EKL8-80-1NC16300
		20A	EKL8-80-1NC2030	EKL8-80-1NC20100	EKL8-80-1NC20300
		25A	EKL8-80-1NC2530	EKL8-80-1NC25100	EKL8-80-1NC25300
		32A	EKL8-80-1NC3230	EKL8-80-1NC32100	EKL8-80-1NC32300
		40A	EKL8-80-1NC4030	EKL8-80-1NC40100	EKL8-80-1NC40300
		50A	EKL8-80-1NC5030	EKL8-80-1NC50100	EKL8-80-1NC50300
		63A	EKL8-80-1NC6330	EKL8-80-1NC63100	EKL8-80-1NC63300
	A	6A	EKL8-80-1NC0630A	EKL8-80-1NC06100A	EKL8-80-1NC06300A
		10A	EKL8-80-1NC1030A	EKL8-80-1NC10100A	EKL8-80-1NC10300A
		16A	EKL8-80-1NC1630A	EKL8-80-1NC16100A	EKL8-80-1NC16300A
		20A	EKL8-80-1NC2030A	EKL8-80-1NC20100A	EKL8-80-1NC20300A
		25A	EKL8-80-1NC2530A	EKL8-80-1NC25100A	EKL8-80-1NC25300A
		32A	EKL8-80-1NC3230A	EKL8-80-1NC32100A	EKL8-80-1NC32300A
		40A	EKL8-80-1NC4030A	EKL8-80-1NC40100A	EKL8-80-1NC40300A
		50A	EKL8-80-1NC5030A	EKL8-80-1NC50100A	EKL8-80-1NC50300A
		63A	EKL8-80-1NC6330A	EKL8-80-1NC63100A	EKL8-80-1NC63300A
80A	EKL8-80-1NC8030A	EKL8-80-1NC80100A	EKL8-80-1NC80300A		

Circuit Diagram

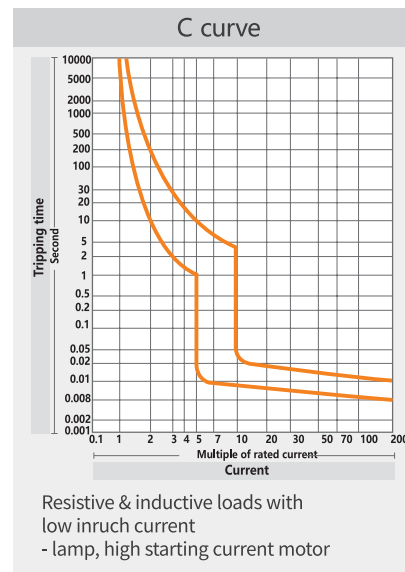
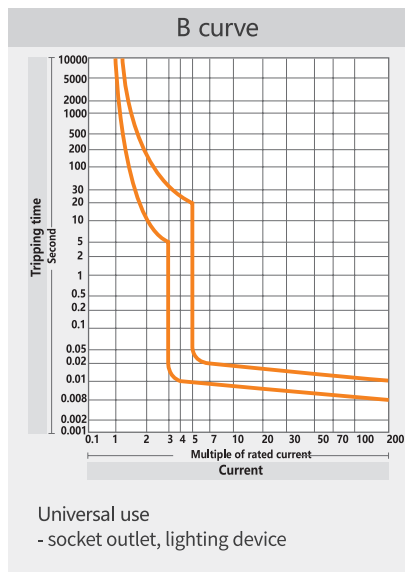


Dimension (mm)



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



Temperature Derating Table

Rated Current (A)	Correction factor for ambient temperature											
	-40°C	-30°C	-20°C	-10°C	0°C	10°C	20°C	30°C	40°C	50°C	60°C	70°C
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



KEEP YOU AWAY FROM ELECTRICAL FIRE

Overview

Following the publication of Amendment 2 of the 18th Edition Wiring Regulation on 28th March 2022, the use of Arc Fault Detection Devices (AFDD) has been made mandatory in certain types of installations.

Regulation 421.1.7 now states AFDD conforming to BS EN 62606 shall be provided for single-phase AC final circuits supplying socket-outlets with a rated current not exceeding 32 A in:

- Higher Risk Residential Buildings(HRRB)
- Houses in Multiple Occupation (HMO)
- Purpose-Built Student Accommodation(PBSA)
- Care homes

For all other premises with socket-outlets up to 32A, the use of AFDDs is alsorecommended.

What types of circuits can AFDD be used on?

The regulations state AC single-phase circuits not exceeding 230V, that includes ring circuits, radials etc. Where used, AFDD shall be placed at the origin of the circuit to be protected.

EKL17-40AFD devices are a single module device which fits the existing busbar system of the existing arrangement. The device offers protection against overcurrent, short circuit, earth leakage and arc fault all in one device and are available in B&C Curve variants. It can direct replacement RCBO in existing consumer units.



Features

- Rated6-40A
- Series and parallel arc fault detection
- Combined arc fault detection, short circuit, overload and earth leakage detection
- 10,30,100,300mA earth leakage detection Type A
- B and C curve tripping characteristics
- Switched Live Neutral
- Fits existing busbar system
- Self testing (AFDD function only)

Complete Circuit Protection

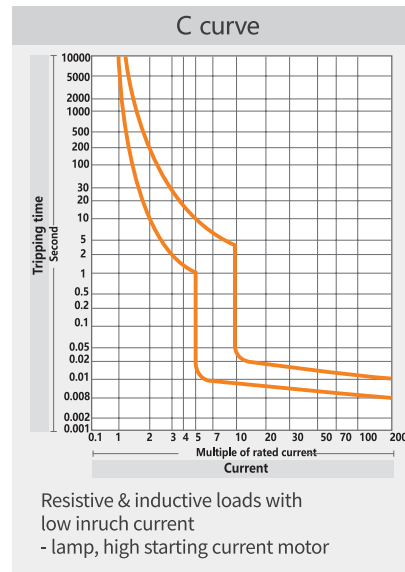
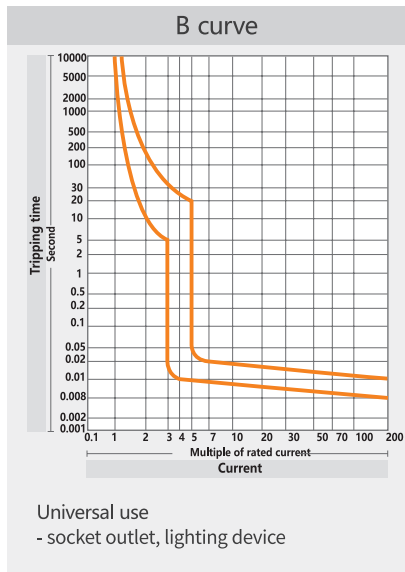
	Over Current	Short Circuit	Earth Leakage	Series Arc Fault	Parallel Arc Fault
MCB	✓	✓	✗	✗	✗
RCCB	✗	✗	✓	✗	✗
RCBO	✓	✓	✓	✗	✗
AFDD	✗	✗	✗	✓	✓
AFDD Integrated with RCBO	✓	✓	✓	✓	✓

Technical Data

Standard	IEC/EN61009-1, IEC62026
Protection	Arc Fault Protection, Overload Protection, Short-Circuit Protection, Earth-Leakage Protection
Type of trip	Ground fault: Electronic
	Overload and short circuit: Thermo-magnetic
Type of protection(electric leakage)	A
No. of poles	1P+N (N pole can be connected and disconnected)
Rated currents (In)	6, 10, 16, 20, 25, 32, 40A
Rated sensitivity currents IΔn	10, 30, 100, 300mA
Residual current off-time under IΔn	≤ 0.1s
Reted residual making and breaking capacity (IΔm)	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)×In
Magnetic release characteristic	B: (3-5)×In, C: (5-10)×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

Tripping Characteristic (IEC61009-1)

Curve	Rated current	Condition						
		Thermal release				Magnetic release		
		Non-tripping	Tripping	Non-tripping	Tripping time	Holding current	Tripping current	Tripping time
B	6-40A	1.13×In		≤ 1h		3×In		≥ 0.1
			1.45×In		< 1h		5×In	< 0.1
C	6-40A	1.13×In		≤ 1h		5×In		≥ 0.1
			1.45×In		< 1h		10×In	< 0.1



Limit values of operating criteria for AFDD at low arc currents up to 63 A (IEC62026)

Limit values of break time for Ue 230V AFDD

Test arc current (r.m.s.values)	Max breaking time
2.5A	1S
5A	0.5S
10A	0.25S
16A	0.15S
32A	0.12S
63A	0.12S

Note:

1. The test arc current is the expected current before ignition occurs in the test circuit.
2. Low arc currents can occur due to insulation faults phase to earth or series arcing.

Led indicator instruction

What to do if AFDD/RCBO trips?

1. Disconnect all electrical appliances connected to the circuit.
2. Reset and trigger AFDD/RCBO to 'ON' position.
3. For the description of LED indicators due to devices faulty-please refer to the Table 1 below.
- 3.1 If the fault indicator is normal, the tripping fault is a short-circuit or an overload.
4. Switch AFDD/RCBO to 'ON' position and then connect 1 appliance one at a time on the circuit to see which device is causing the tripping of the AFDD.
5. Once faulty appliance has been identified, Do not use it, until it has been repaired or disconnected from the circuit.
6. After the faulty appliance has been repaired or disconnected, switch AFDD/RCBO to 'ON' position.
7. If the fault is still not confirmed, please contact a qualified electrician for inspection.

SN	LED Indicator Instruction		
1	LED-green light goes on.	Device normal operation	
2	LED-red light goes on 1 time and goes out 1 time, 5 cycles.	Arc fault	
3	LED-yellow light is on for 2 seconds around and off for 1 second around, 3 cycles.	Residual current fault	
4	LED-red light goes on.	Arc self-check failure	

The LED light flashing program in Table is described in detail:

1. When the product is in normal operation, the light on the AFDD will remain green.
2. Should the AFDD trip off and to check for an arc fault trip, put the AFDD into the 'ON' position and the red light will flash continuously for 5 cycles. Then the arc module will detect itself and turn green when no fault is detected. If there is a fault, the red light will be lit.
3. Should the AFDD trip and to check for a Residual current fault, put the AFDD into the 'ON' position and the yellow light will keep on for about 2 seconds, and then remain off for about 1 second, for a total of 3 cycles. Then the arc module detects itself and lights green when no fault is detected. If there is a fault, the red light will be on.
4. Arc self-test failure, red light on. (Please contact a qualified electrician as the device may need to be changed.)

Selection

RCD type

Type A-Tripping is ensured for sinusoidal, alternating residual currents as well as for pulsed DC residual currents, whether they be quickly applied or slowly increase.


Tripping curve

B curve (3-5 In) protection and control of the circuits against overloads and short-circuits; protection for people and big length cables in TN and IT systems.


C curve (5-10 In) protection and control of the circuits against overloads and short-circuits; protection for resistive and inductive loads with low inrush current.

Product Selection Form

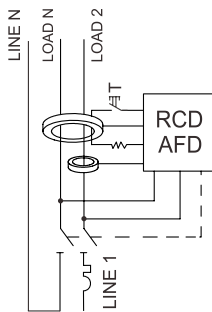
AFDD/RCBO EKL17-40AFD (B Curve)

Poles	Rated Current(A)	Sensitivity			
		10mA	30mA	100mA	300mA
	6A	EKL17-40AFD-1NB0610A	EKL17-40AFD-1NB0630A	EKL17-40AFD-1NB06100A	EKL17-40AFD-1NB06300A
	10A	EKL17-40AFD-1NB1010A	EKL17-40AFD-1NB1030A	EKL17-40AFD-1NB10100A	EKL17-40AFD-1NB10300A
	16A	EKL17-40AFD-1NB1610A	EKL17-40AFD-1NB1630A	EKL17-40AFD-1NB16100A	EKL17-40AFD-1NB16300A
	20A	EKL17-40AFD-1NB2010A	EKL17-40AFD-1NB2030A	EKL17-40AFD-1NB20100A	EKL17-40AFD-1NB20300A
	25A	EKL17-40AFD-1NB2510A	EKL17-40AFD-1NB2530A	EKL17-40AFD-1NB25100A	EKL17-40AFD-1NB25300A
	32A	EKL17-40AFD-1NB3210A	EKL17-40AFD-1NB3230A	EKL17-40AFD-1NB32100A	EKL17-40AFD-1NB32300A
	40A	EKL17-40AFD-1NB4010A	EKL17-40AFD-1NB4030A	EKL17-40AFD-1NB40100A	EKL17-40AFD-1NB40300A

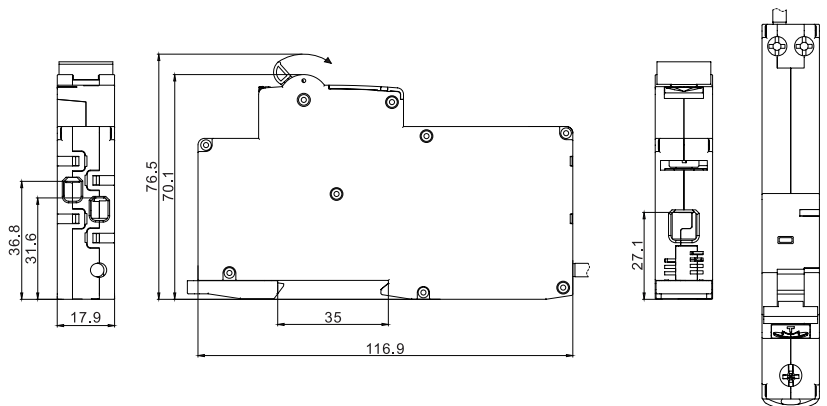
AFDD/RCBO EKL17-40AFD (C Curve)

Poles	Rated Current(A)	Sensitivity			
		10mA	30mA	100mA	300mA
	6A	EKL17-40AFD-1NC0610A	EKL17-40AFD-1NC0630A	EKL17-40AFD-1NC06100A	EKL17-40AFD-1NC06300A
	10A	EKL17-40AFD-1NC1010A	EKL17-40AFD-1NC1030A	EKL17-40AFD-1NC10100A	EKL17-40AFD-1NC10300A
	16A	EKL17-40AFD-1NC1610A	EKL17-40AFD-1NC1630A	EKL17-40AFD-1NC16100A	EKL17-40AFD-1NC16300A
	20A	EKL17-40AFD-1NC2010A	EKL17-40AFD-1NC2030A	EKL17-40AFD-1NC20100A	EKL17-40AFD-1NC20300A
	25A	EKL17-40AFD-1NC2510A	EKL17-40AFD-1NC2530A	EKL17-40AFD-1NC25100A	EKL17-40AFD-1NC25300A
	32A	EKL17-40AFD-1NC3210A	EKL17-40AFD-1NC3230A	EKL17-40AFD-1NC32100A	EKL17-40AFD-1NC32300A
	40A	EKL17-40AFD-1NC4010A	EKL17-40AFD-1NC4030A	EKL17-40AFD-1NC40100A	EKL17-40AFD-1NC40300A

Circuit Diagram



Dimension (mm)









Technical Data

Standard	IEC/EN60947-3
No. of poles	1P, 2P, 3P, 4P
Rated voltage (Ue)	230/240V~(1P), 400/415V~(2,3,4P)
Rated currents (In)	25, 32, 40, 50, 63, 80, 100, 125A
Rated frequency	50/60Hz
Utilization category	AC-22A
Short-time withstand current (Icw)	2000A/1s
Rated short-circuit making capacity (Icm)	3000A
Rated making & breaking capacity	3Ie, 1.05Ue, CosΦ=0.65
Rated impulse withstand voltage (Uimp)	6,000V
Dielectric test voltage at Ind. Freq. for 1 min	2kV
Rated insulation voltage (Ui)	500V
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

Product Selection Form

Poles	Rated Current(A)	Reference No.
 <p>1P</p>	25A	EKD12-100-1-025
	32A	EKD12-100-1-032
	40A	EKD12-100-1-040
	50A	EKD12-100-1-050
	63A	EKD12-100-1-063
	80A	EKD12-100-1-080
	100A	EKD12-100-1-100
	125A	EKD12-100-1-125
 <p>2P</p>	25A	EKD12-100-2-025
	32A	EKD12-100-2-032
	40A	EKD12-100-2-040
	50A	EKD12-100-2-050
	63A	EKD12-100-2-063
	80A	EKD12-100-2-080
	100A	EKD12-100-2-100
	125A	EKD12-100-2-125
 <p>3P</p>	25A	EKD12-100-3-025
	32A	EKD12-100-3-032
	40A	EKD12-100-3-040
	50A	EKD12-100-3-050
	63A	EKD12-100-3-063
	80A	EKD12-100-3-080
	100A	EKD12-100-3-100
	125A	EKD12-100-3-125
 <p>4P</p>	25A	EKD12-100-4-025
	32A	EKD12-100-4-032
	40A	EKD12-100-4-040
	50A	EKD12-100-4-050
	63A	EKD12-100-4-063
	80A	EKD12-100-4-080
	100A	EKD12-100-4-100
	125A	EKD12-100-4-125

Endurance(operations)

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

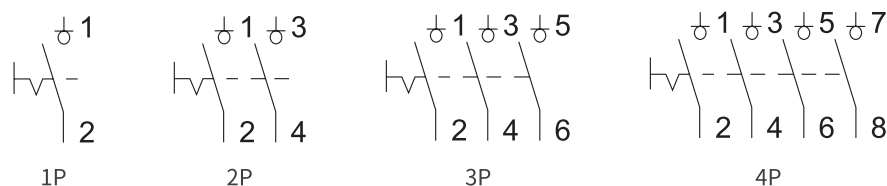
Wiring

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	25	3.5
100	35	3.5

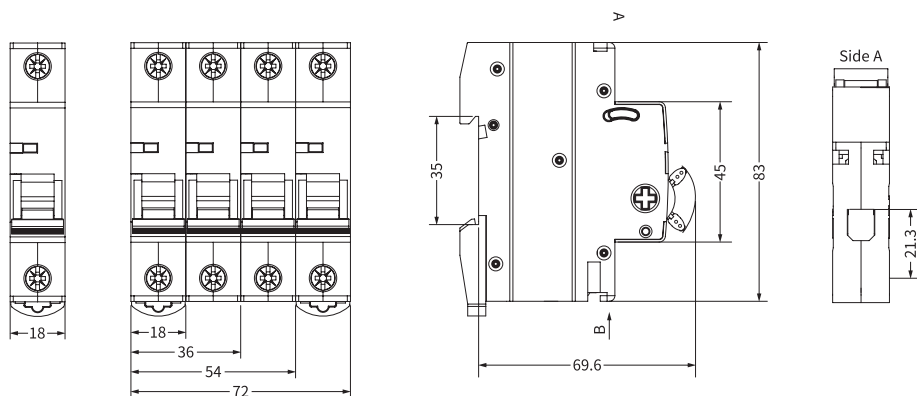
Features

- 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

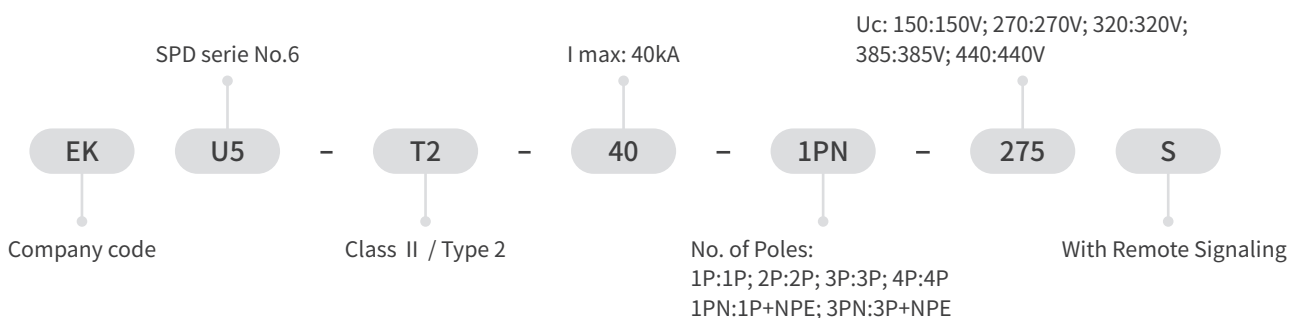


Dimension (mm)





Product Selection Guide



Technical Data

No. of poles	1P	2P	3P	4P	1P+NPE	3P+NPE
Network systems	TN-S, TN-C, TT(only L-N)	TN-S	TN-C	TN-S	TT, TN-S	
Mode of protection	L-PE, N-PE(onlyTN-S), L-PEN, L-N	L-PE, N-PE	L-PEN	L-PE, N-PE	L-N, N-PE	
Protective elements	High Energy MOV				High Energy MOV and GDT	
Maximum continuous operating voltage Uc (L-N)	150V	275V	320V	385V	440V	
Maximum continuous operating voltage Uc (N-PE)			255V			
Norminal discharge current In (8/20μs) (L-N)/(N-PE)			10kA			
Maximum discharge current Imax (8/20μs) (L-N)/(N-PE)			20kA			
Voltage protection level Up (L-N)/(N-PE)	0.8kV/1.5kV	0.8kV/1.5kV	1.2kV/1.5kV	1.45kV/1.5kV	1.6kV/1.5kV	
Voltage protection level 5kA Up	0.5kV	0.8kV	1.0kV	1.2kV	1.4kV	
Response time tA (L-N)/(N-PE)	≤ 25ns / ≤ 100ns					
Operating temperature range Tu	-40°C to +80°C					
Max. Back-up fuse	125 A gL/gG					
Operating state/fault indication	Green/Red(L-N), Yellow(N-PE)					
Cross-section area (Min.)/(Max.)	4mm ² /35mm ²					
Mounting	35 mm DIN Rail, EN 60715					
Enclosure material	Thermal Plastic UL94-V0					
Degree of protection	IP20 (built-in)					

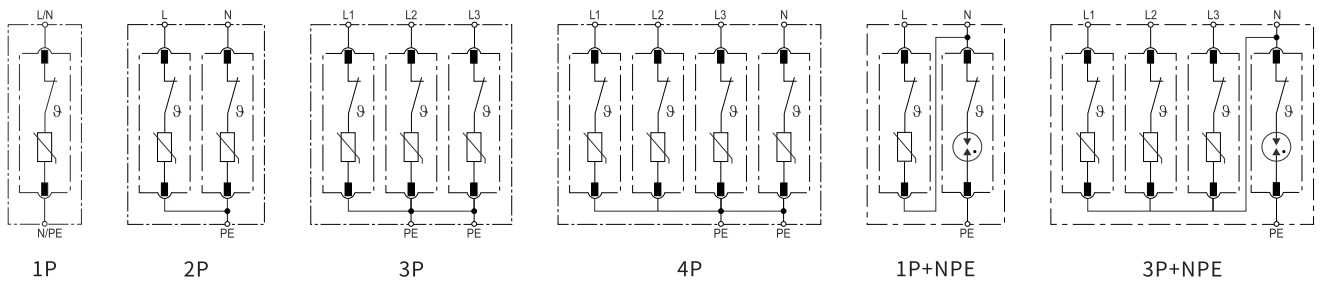
SPD Type Reference List

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

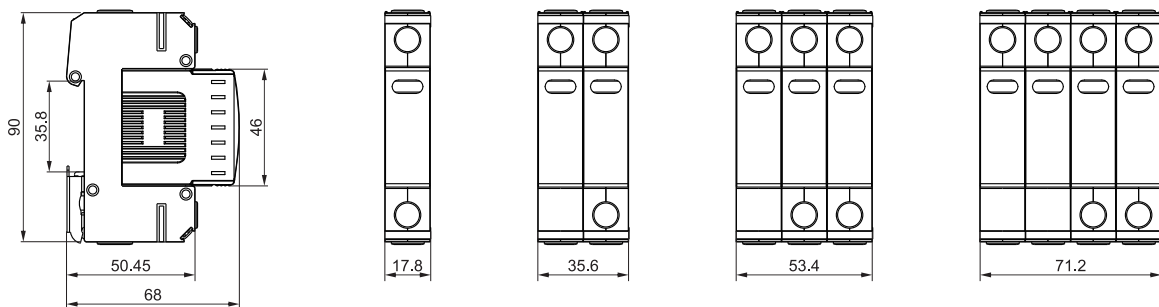
With Remote Signaling

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

Schematic Diagram

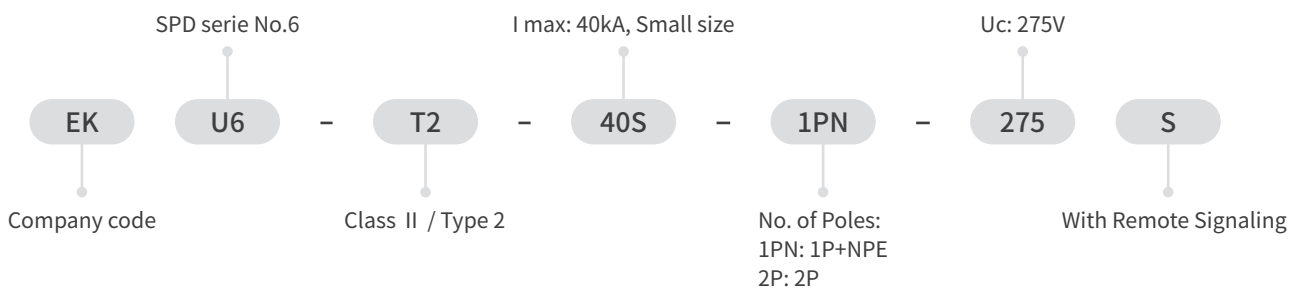


Dimension (mm)





Product Selection Guide



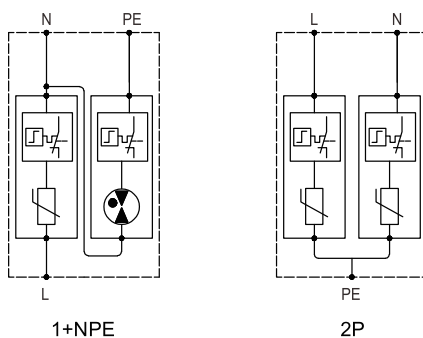
Technical Data

No. of poles	2P	1P+NPE
Network systems	TN-S	TT, TN-S
Mode of protection	L-PE, N-PE	L-N, N-PE
Protective elements	High Energy MOV	High Energy MOV and GDT
Maximum continuous operating voltage Uc (L-N)	275V	
Maximum continuous operating voltage Uc (N-PE)	255V	
Norminal discharge current In (8/20µs) (L-N)/(N-PE)	20kA	
Maximum discharge current I _{max} (8/20µs) (L-N)/(N-PE)	40kA	
Voltage protection level Up (L-N)/(N-PE)	1.5kV/1.5kV	
Voltage protection level 5kA Up	1.0kV	
Response time t _A (L-N)/(N-PE)	≤ 25ns / ≤ 100ns	
Operating temperature range Tu	-40°C to +80°C	
Max. Back-up fuse	125 A gL/gG	
Operating state/fault indication	Green/Red	
Cross-section area (Min.)/(Max.)	4mm ² /10mm ² (L/N), 16mm ² (PE)	
Mounting	35 mm DIN Rail, EN 60715	
Enclosure material	Thermal Plastic UL94-V0	
Degree of protection	IP20 (built-in)	

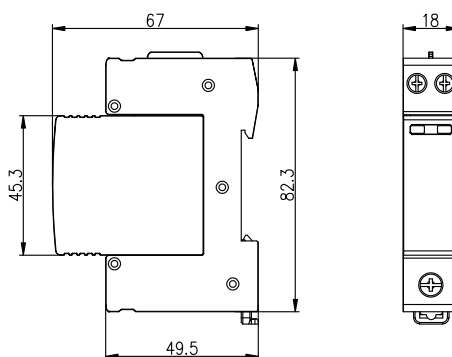
SPD Type Reference List

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

Schematic Diagram



Dimension (mm)

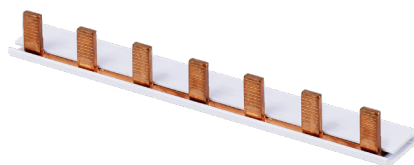


Terminal Bars

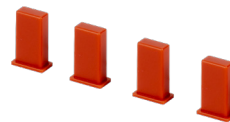


Reference No.	Description
EKTB-5	5 Hole Terminal Bar
EKTB-6	6 Hole Terminal Bar
EKTB-7	7 Hole Terminal Bar
EKTB-8	8 Hole Terminal Bar
EKTB-9	9 Hole Terminal Bar
EKTB-11	11 Hole Terminal Bar
EKTB-12	12 Hole Terminal Bar
EKTB-16	16 Hole Terminal Bar
EKTB-19	19 Hole Terminal Bar
EKTB-24	24 Hole Terminal Bar
EKTB-26	26 Hole Terminal Bar
EKTB-27	27 Hole Terminal Bar

Busbar



Busbar



Busbar caps

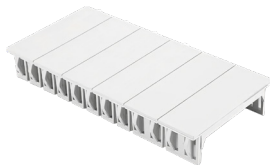
Reference No.	Description
EKBB-1P100A2	1P Pin tye 2 Ways
EKBB-1P100A3	1P Pin tye 3 Ways
EKBB-1P100A5	1P Pin tye 5 Ways
EKBB-1P100A7	1P Pin tye 7 Ways
EKBB-1P100A8	1P Pin tye 8 Ways
EKBB-1P100A9	1P Pin tye 9 Ways
EKBB-1P100A10	1P Pin tye 10 Ways
EKBB-1P100A12	1P Pin tye 12 Ways
EKBB-1P100A13	1P Pin tye 13 Ways
EKBB-1P100A16	1P Pin tye 16 Ways
EKBB-1P100A17	1P Pin tye 17 Ways
EKBB-1P100A23	1P Pin tye 23 Ways
EKCAP	Busbar Caps (Red)

DIN Rails



Reference No.	Description
EKDR-6	6 Ways DIN Rail
EKDR-10	10 Ways DIN Rail
EKDR-14	14 Ways DIN Rail
EKDR-18	18 Ways DIN Rail
EKDR-24	24 Ways DIN Rail

Blanking Strip



EKPBS



EKMBS



EKBP18D



EKBP18B

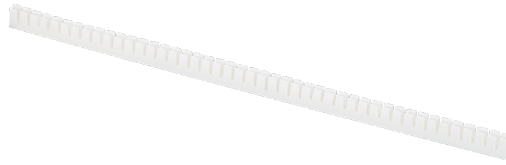
Reference No.	Description
EKPBS	Plastic blanking strip (18mm width 1P)
EKMBS	Metal blanking strip (18mm width 1P)
EKBP18D	Din Rail Blank Module (18mm width 1P)
EKBP18B	125A Connector Din Rail Mounted (18mm width 1P)

Mains Tails Clamp



Reference No.	Description
EKMTC	Cable Clamp for supply cables (25mm ²)

Grommet Strip



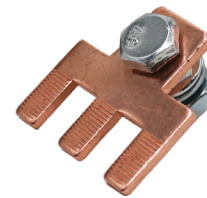
Reference No.	Description
EKGS	Grommet Strip for protection distribution box cover, panel, and knockout hole.

RCD TPN Fitting Kit




A TPN RCCB link kit is a set of components used to connect a residual-current circuit breaker (RCCB) to a three-phase power distribution system. It typically includes a neutral link, a phase link, and a terminal block.

Reference No.	Description
EKTPN-LK	4P RCD link kit for TPN



The Single-Phase Supply Kit converts a TPN board to a single phase incoming 125A supply. It is designed for installation on the supply side of 3 or 4 pole incoming devices.

Reference No.	Description
EKTPN-SPL	TPN single phase fork 125A

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