

MCCB SERIES

Overload & Short Circuit Protection

Model : KMC



ABOUT US

Kobn General Electric Solution engineers high-performance **electrical protection** for demanding industrial and commercial applications.

The KMC Series MCCB embodies Kobn's legacy of engineering excellence and uncompromising quality, delivering unmatched performance in overload and short-circuit protection. Combining rugged construction with advanced safety systems and precision engineering, these circuit breakers are built for relentless reliability in critical electrical applications—from industrial power distribution to commercial installations. A testament to Kobn's core values, the KMC Series sets the standard for operational efficiency, safety compliance, and innovative design in electrical protection.

Why Choose the KMC Series?

The KMC Series MCCB is engineered to excel in the most demanding electrical environments, offering an unmatched combination of high-efficiency protection, robust safety features, and long-term reliability—making it the ultimate choice for safeguarding critical operations. Designed to handle high fault currents with precision, it ensures consistent, dependable performance for applications where operational safety and system integrity are non-negotiable.

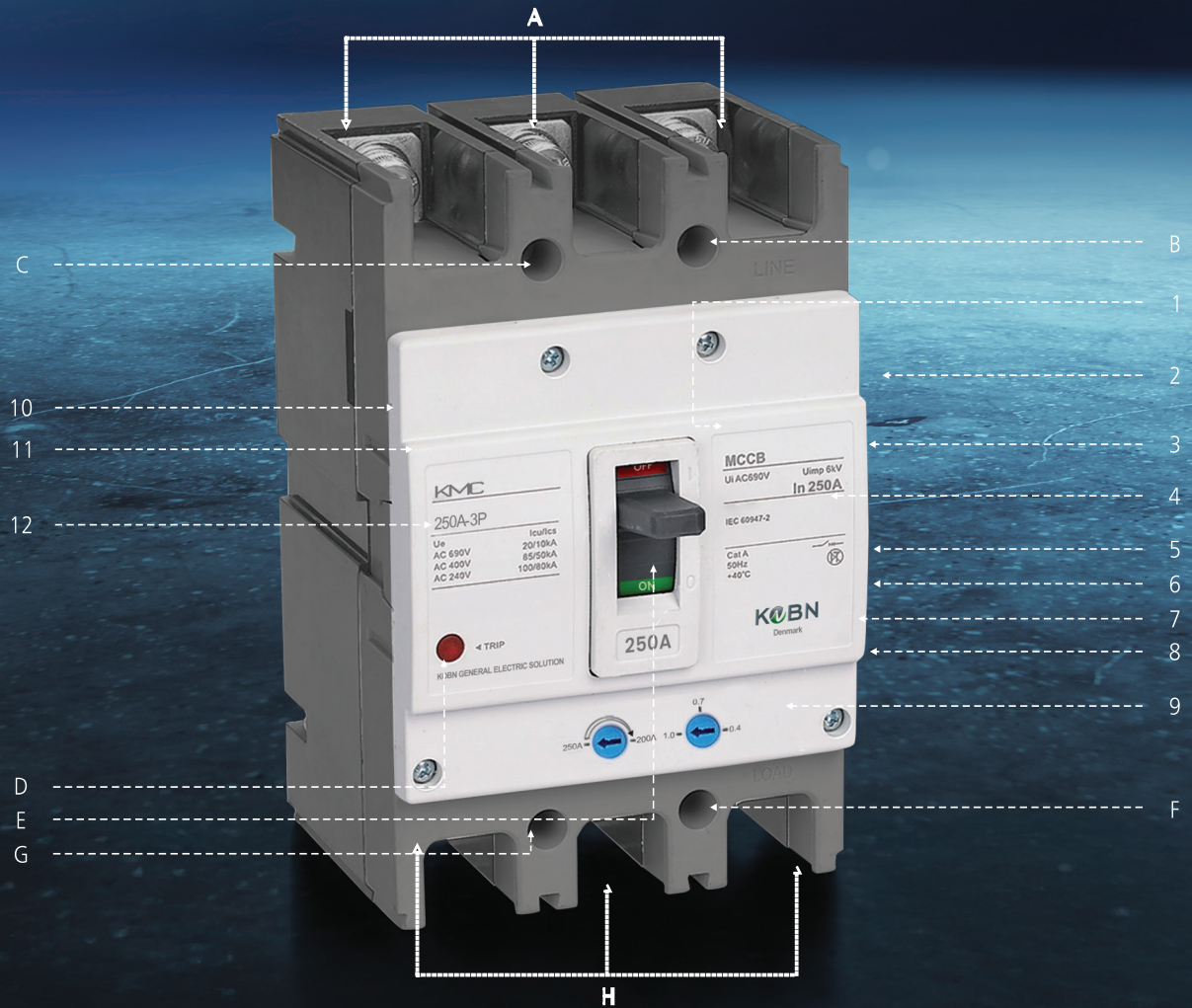
Built with durable materials, advanced trip mechanisms, and compliance with global standards (IEC, UL), the KMC Series is constructed to endure the rigors of continuous operation in harsh conditions. Its user-friendly design, modular accessories, and optional remote monitoring capabilities further enhance functionality and control, whether deployed in industrial plants, data centers, or infrastructure projects.

For industries that demand zero-compromise safety, energy efficiency, and long-term reliability in electrical protection, the KMC Series MCCB stands as the definitive solution—backed by Kobn's legacy of engineering excellence and global certifications.





MARKING & CONFIGURATION



Printing instruction

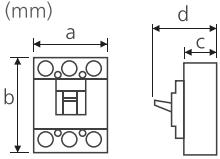
1	Ue: Rated operational voltage
2	Company logo
3	Rated frequency
4	In: Rated current
5	Uimp: Rated impulse withstand voltage
6	Instantaneous/short circuit trip current
7	IEC/EN standard
8	Calibrated temperature as defined by IEC/EN 60947-2
9	Company name
10	Product code
11	Icu: Ultimate breaking capacity
12	Ics: Service breaking capacity

Function instruction

A	Up-stream cable connections
B	Fixing hole
C	Fixing hole
D	"Push to trip" button for over current trip
E	Operating handle
F	Fixing hole
G	Fixing hole
H	Down-stream cable connections



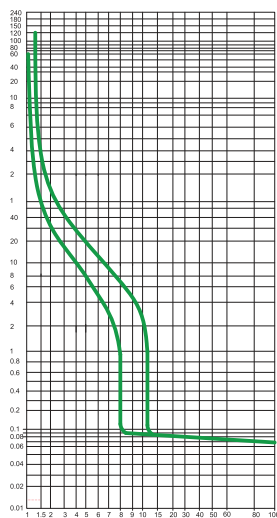
TECHNICAL DATA SHEET

Ampere frame size		50AF						100AF	
Product type		KMC2-50/2		KMC2-50/3		KMC2-100/2		KMC2-100/3	
Number of poles		2		3		2		3	
Rated frequency (Hz)		50/60		50/60		50/60		50/60	
Rated current (A)	In	5, 10	15, 20, 30, 40, 50	5, 10	15, 20, 30, 40, 50	63, 80, 100		63, 80, 100	
Rated voltage (V)	Ue	220/415		220/415		220/415		220/415	
Rated Insulated voltage (V)	Ui	500		500		500		500	
Rated impulse voltage (kV)	Uimp	6		6		6		6	
Ultimate breaking capability (kA) GB 14048.2, IEC/EN 60947-2	Icu	220V	415V	220V	415V	220V	415V	220V	415V
		5	2.5	10	6	5	2.5	10	6
Ics=%×Icu		75%		75%		75%		75%	
Dimensions (mm) 	a	50		75		50		75	
	b	98		98		98		98	
	c	60		60		60		60	
	d	80		80		80		80	
Weight (kg)		0.31		0.41		0.31		0.41	

CHARACTERISTICS CURVES

KMC2-50

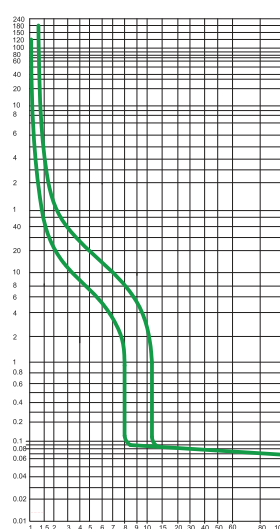
Rated Current(5A-50A)



Rated current times

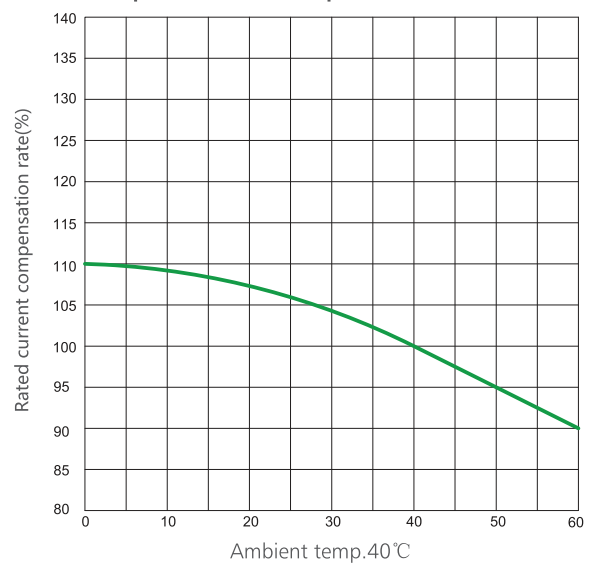
KMC2-100

Rated Current(63A-100A)



Rated current times

Temperature compensation curves



Innovation in Protection

Where engineering excellence meets uncompromising safety in electrical systems. Precision-built circuit breakers that conquer extreme demands with relentless reliability.



CHARACTERISTICS CURVES TABLE

Test No.	Load current	Rated current	Initial state	Time	Estimated result
Over-load					
1.	1.05 I_n	$I_n \leq 63A$	cold state	$t < 1h$	Non-trip
		$I_n > 63A$		$t < 2h$	
2.	1.30 I_n	$I_n \leq 63A$	continuing the test	$t < 1h$	Trip
Short circuit					
3.	10 $I_n \times 80\%$	All ampere	cold state	$t < 0.2s$	Non-trip
	10 $I_n \times 120\%$			$t < 0.2s$	Trip

TEMPERATURE COMPENSATION TABLE

(IEC/EN 60947-2) (Calibration at 40°C)

Product code	Rated current range	Compensation coefficient						
		0°C	10°C	20°C	30°C	40°C	50°C	60°C
KMC2-50	5A~50A	110%	109%	107%	104%	100%	95%	90%
KMC2-100	63A~100A	110%	109%	107%	104%	100%	95%	90%





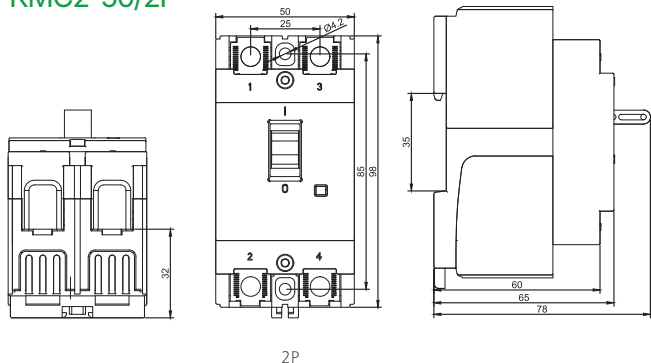
KMC MCCB SERIES

Overload & Short Circuit Protection

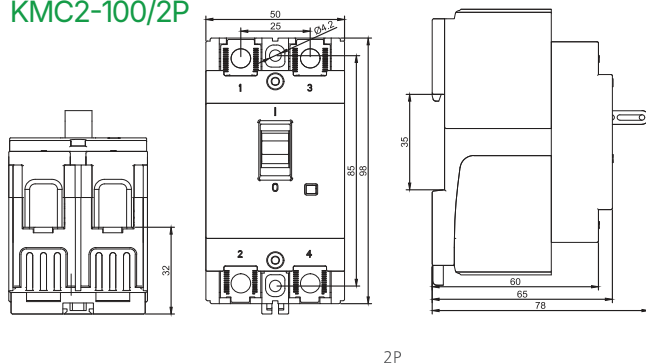


OUTLINE DIMENSION

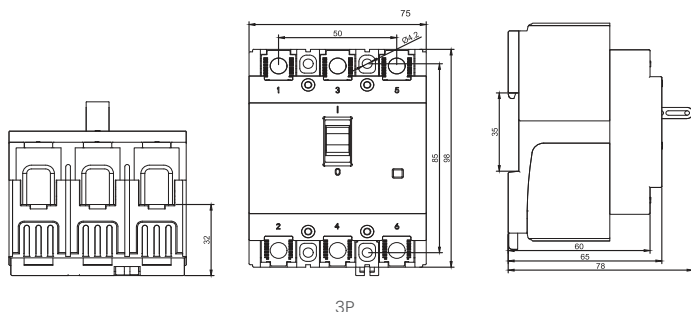
KMC2-50/2P



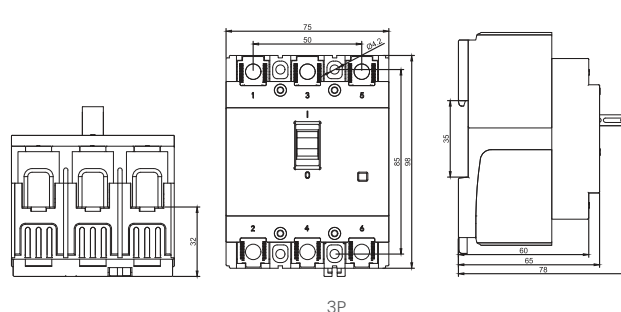
KMC2-100/2P



KMC2-50/3P



KMC2-100/3P



TYPE GUIDE

CLASSIFICATION

According to the Pole :

According to the Breaking Capacity :

According to the rated current :

1-pole, 2-poles, 3-poles, 4-poles

S-type, H-type

Fix type, Adjustable type(0.8In~1.0In)

N	M	F4	H	3	250	AX
KOBN	MCCB Series	Ampere frame	Breaking capacity level	Number of the poles	Rated current	Built-in Accessories
		F1 63A	S Standard capacity type	1 - One pole	15A~63A F1	AX Auxiliary switch
		F2 125A	H High capacity type	2 - Two Poles	15A~125A F2	AL Alarm switch
		F3 160A		3 - Three Poles	15A~160A F3	SHT Shunt trip
		F4 250A		4 - Four poles	100A~250A F4	AX+AX Auxiliary switch Auxiliary switch
		F5 400A			250A~400A F5	AX+AL Auxiliary switch Alarm switch
		F6 800A			500A~800A F6	

Remark:

For the rated current ,it has fix type and adjustable type .

The default type is adjustable type(0.8In~1.0In) .

If need fix type or have other special requirement ,please advise in advance .

Built-out Accessories

IB	Inter-phase Insulation Barrier
STC	Short Terminal Cover
CCB	Copper Connection Bar



TECHNICAL DATA TABLE



KMC5 (400A)				KMC6 (800A)			
S		H		S		H	
3P	4P	3P	4P	3P	4P	3P	4P
KMC5-S3	KMC5-S4	KMC5-H3	KMC5-H4	KMC6-S3	KMC6-S4	KMC6-H3	KMC6-H4
250.315.350.400 ③				500.630.700.800			
x	x	x	x	x	x	x	x
x	x	x	x	x	x	x	x
240/415				240/415			
1000				1000			
8				8			
Conformity with IEC / EN 60947-2				Conformity with IEC / EN 60947-2			
50/60				50/60			
50				65			
37				50			
100%				100%			
4000				2500			
1000				500			
-				-			
-				-			
257*140*103				275*210*103			
257*184*103				275*280*103			



BUILT-IN ACCESSORIES



Shunt trip (SHT)

- The shunt trip is an accessory for remote control.
- The shunt will trip when the input voltage is 70% - 110% of the rated operational voltage.(US)



Auxiliary switch (AX)

- Auxiliary switch is used to indicate the "On" and "Off" status of the breaker.
- Each switch has two contacts with a common connection.
- One is open and the other closed when the circuit breaker is open, and viceversa.



Alarm switch (AL)

- Alarm switch will make immediate audio or visual indication in a tripped breaker due to overload, short circuit or shunt trip to remind people.
- This switch features a closed contact when the circuit breaker is tripped automatically.
- In other words, this switch does not function when the breaker is operated manually.



Combination switch (AX+AX)

It has two auxiliary switch(AX) in a body to connect into the same position of the breaker.



Combination switch (AX+AL)

It has one auxiliary switch(AX) and one alarm switch(AL) in a body to connect into the same position of the breaker.

CONTACT(AX+AL)

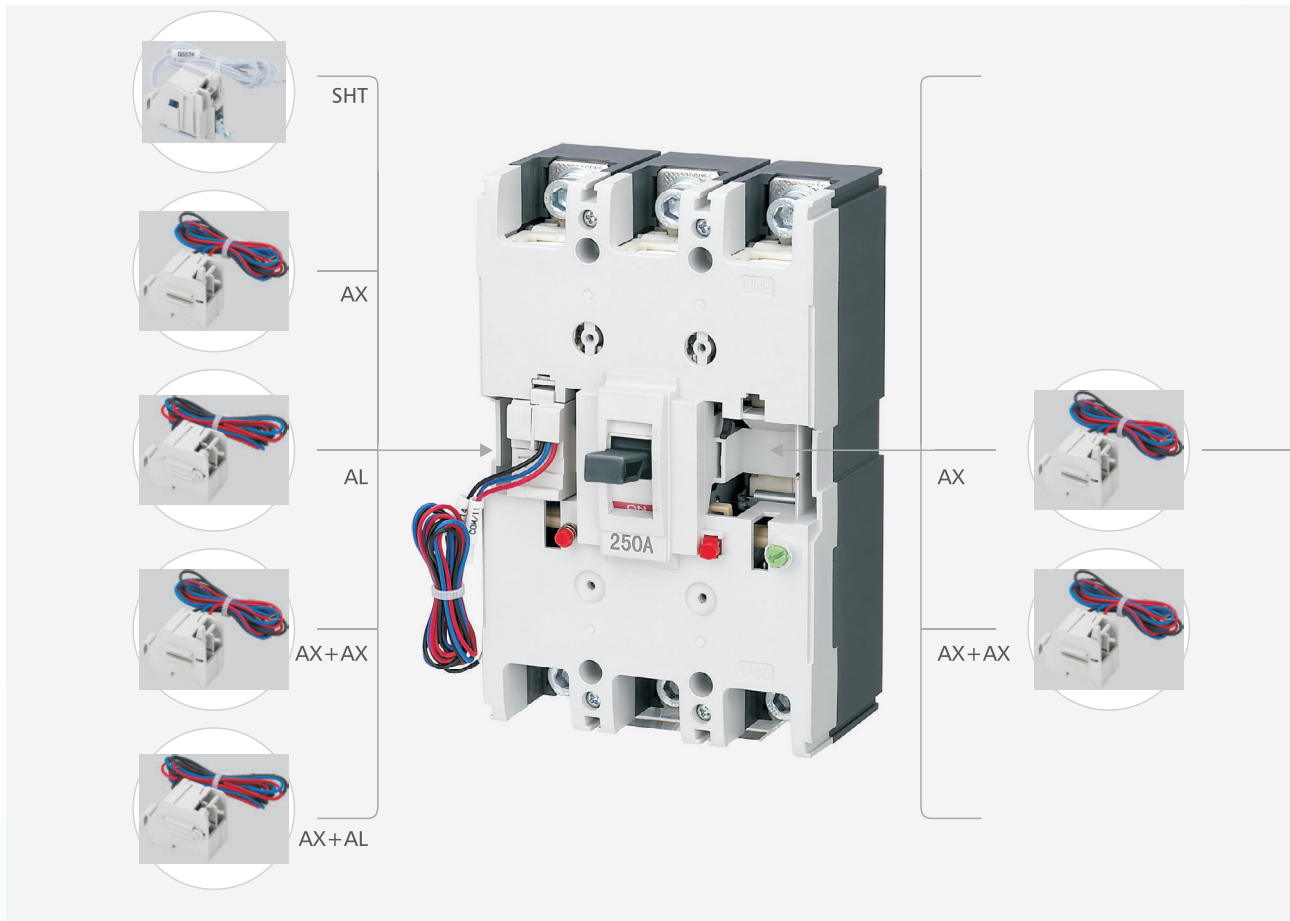
MCCB	ON	OFF	TRIP
AX			
AL			

Maximum Possibilities

Product code	Poles	Left hole position					Right hole position				
		AX	AL	SHT	AX+AX	AX+AL	AX	AL	SHT	AX+AX	AX+AL
KMC1(63A)	2P	-	-	-	-	-	√	-	-	√	-
	3P	√	√	√	√	√	√	-	-	√	-
	4P	-	-	-	-	-	-	-	-	-	-
KMC2(125A)	1P	-	-	-	-	-	-	-	-	-	-
	2P	-	-	-	-	-	√	-	-	√	-
	3P	√	√	√	√	√	√	-	-	√	-
KMC3(160A)	4P	√	√	√	√	√	√	-	-	√	-
	3P	-	-	-	-	-	-	-	-	-	-
	4P	-	-	-	-	-	-	-	-	-	-
KMC4(250A)	1P	-	-	-	-	-	-	-	-	-	-
	3P	√	√	√	√	√	√	-	-	√	-
	4P	√	√	√	√	√	√	-	-	√	-
KMC5(400A)	3P	-	-	-	-	-	-	-	-	-	-
	4P	-	-	-	-	-	-	-	-	-	-
KMC6(800A)	3P	-	-	-	-	-	-	-	-	-	-
	4P	-	-	-	-	-	-	-	-	-	-



BUILT-IN ACCESSORIES





MARKING & CONFIGURATION



Printing instruction

1	Ue: Rated operational voltage
2	Company logo
3	Rated frequency
4	In: Rated current
5	IΔn: Rated residual operating current(mA)
6	IΔno: Rated residual non-operating current (mA)
7	Uimp: Rated impulse withstand voltage
8	Instantaneous/short circuit trip current
9	Calibrated temperature as defined by IEC/EN 60947-2
10	Company name
11	Product code
12	Icu: Ultimate breaking capacity
13	Ics: Service breaking capacity

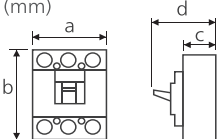
Function instruction

A	Up-stream cable connections
B	Push to trip button for earth fault
C	Fixing hole
D	Fixing hole
E	Push to trip button for over current trip
F	Operating handle
G	Fixing hole
H	Fixing hole
I	Down-stream cable connections



TECHNICAL DATA SHEET

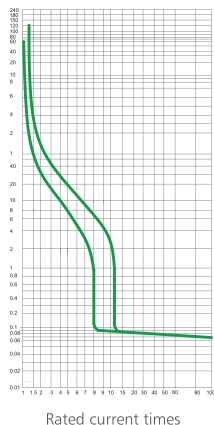


Ampere frame size		50AF							
Product type		KMC2-50/2				KMC2-50/3			
Number of poles		2				3			
Rated frequency (Hz)		50/60				50/60			
Rated current (A)	In	5, 10		15, 20, 30, 40, 50		5, 10		15, 20, 30, 40, 50	
Rated voltage(V)	Ue	220/415				220/415			
Rated Insulated voltage (V), 50/60Hz	Ui	500				500			
Rated impulse voltage (kV)	Uimp	6				6			
Rated residual current (mA)		15/30				15/30			
Action time (sec)		<0.03 sec				<0.03 sec			
Ultimate breaking capability(kA) GB 14048.2, IEC/EN 60947-2	Icu	220V	415V	220V	415V	220V	415V	220V	415V
		5	2.5	10	6	5	2.5	10	6
Ics=%×Icu		75%		75%		75%		75%	
Dimensions (mm) 	a	50				75			
	b	98				98			
	c	60				60			
	d	80				80			
Weight (kg)		0.31				0.41			

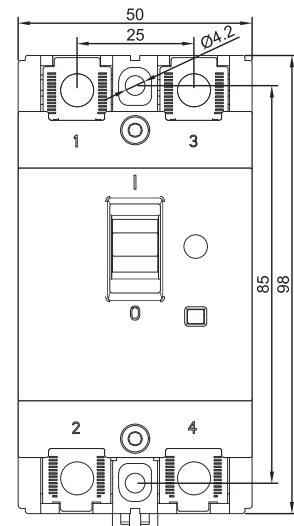
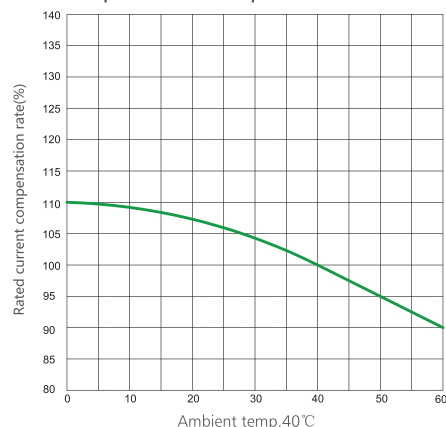
CHARACTERISTICS CURVES

KMC2-50

Rated Current(5A-50A)



Temperature compensation curves





KMC MCCB SERIES

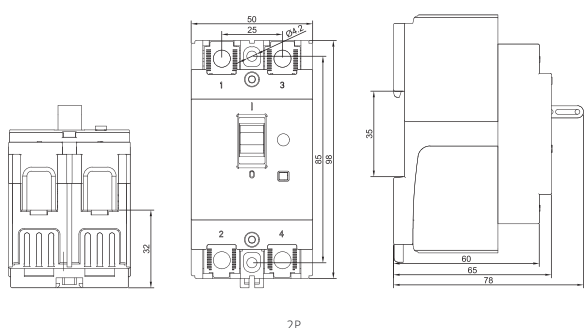
Overload & Short Circuit Protection



OUTLINE DIMENSION

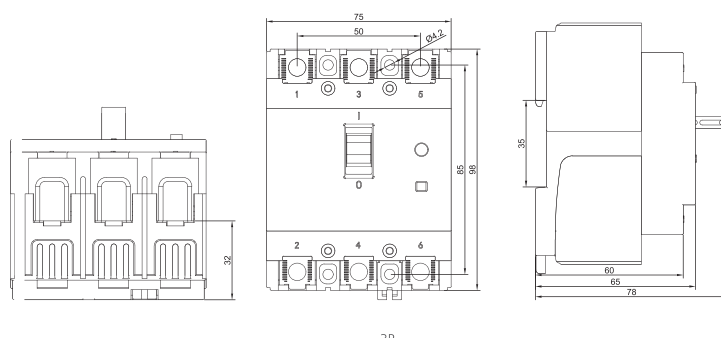


KMC2-50/2P



2P

KMC2-50/3P



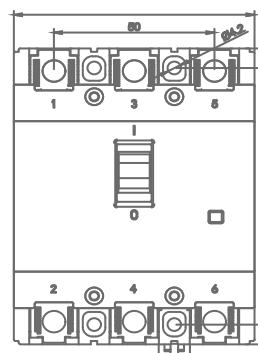
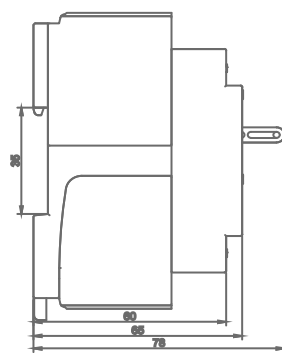
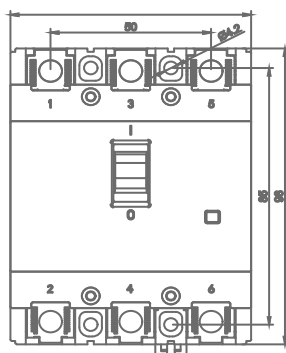
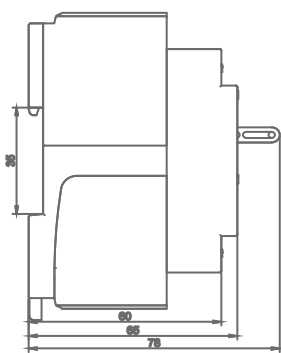
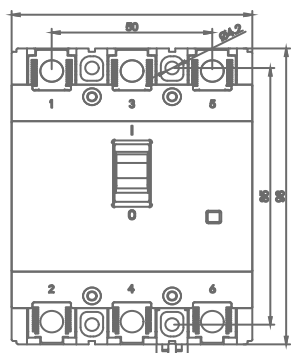
3P

Test No.	Load current	Rated current	Initial state	Time	Estimated result
Over-load					
1.	1.05 In	In ≤ 63A	cold state	t < 1h	Non-trip
		In > 63A		t < 2h	
2.	1.30 In	In ≤ 63A	continuing the test	t < 1h	Trip
Short circuit					
3.	10 In*80%	All ampere	cold state	t < 0.2s	Non-trip
	10 In*120%			t < 0.2s	Trip

Temperature Compensation Table

(IEC/EN 60947-2) (Calibration at 40°C)

Product code	Rated current range	Compensation coefficient						
		0°C	10°C	20°C	30°C	40°C	50°C	60°C
KMC2-50	5A~50A	110%	109%	107%	104%	100%	95%	90%



KOBN GENERAL ELECTRIC SOLUTION

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