MS·8

modular systems

product catalog

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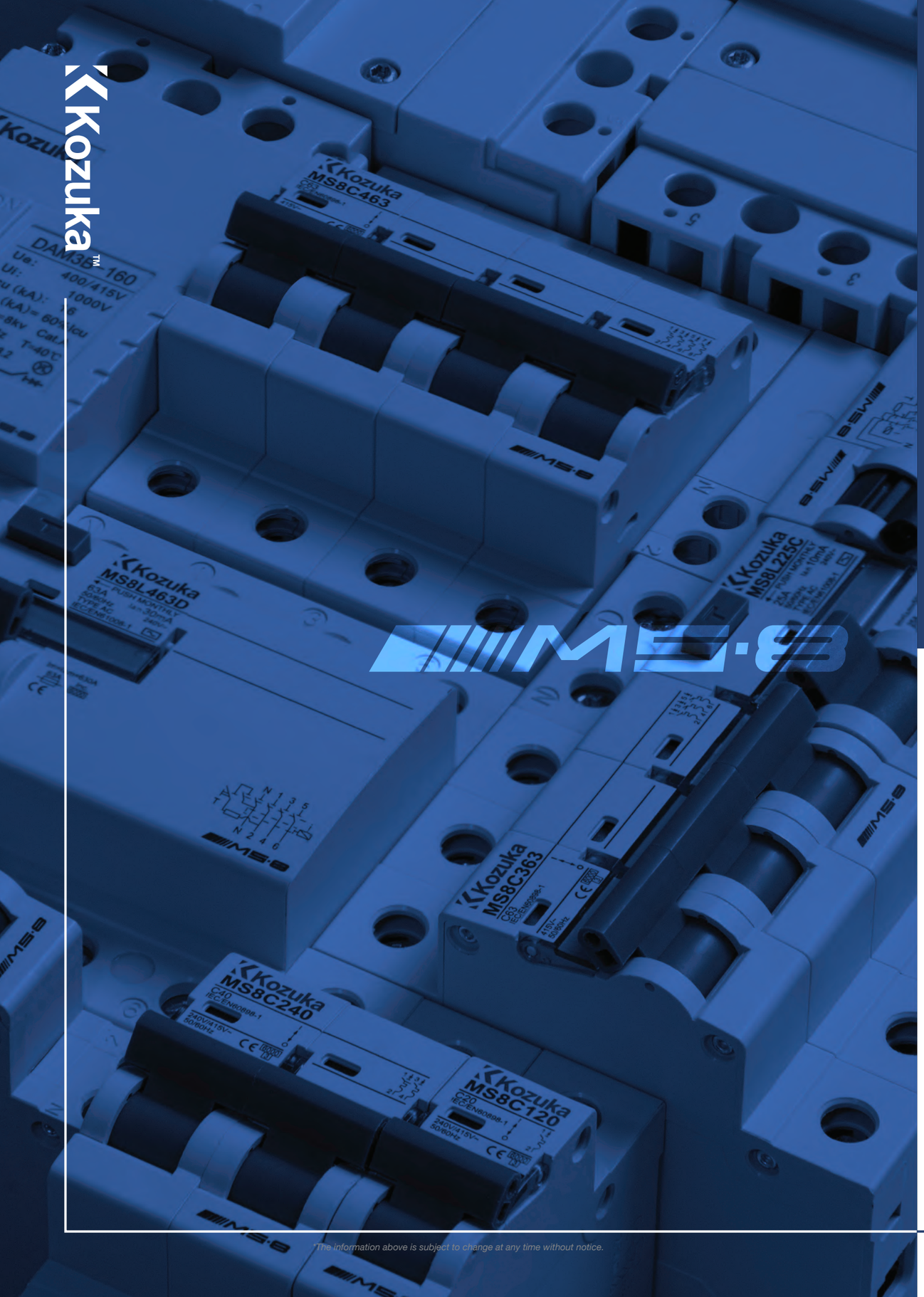

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OUR LABORATORY

Up to now has formed a total area of nearly 400 square meters, to meet the

- IEC/EN60898
- IEC/EN61008
- IEC/EN61009
- IEC/EN60947
- IEC/EN61095
- IEC/EN60669
- IEC/EN60598

and other international standards.

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Breaking Test System

IEC/EN60898 D1 program E1 program E2 program E3 program

IEC/EN61008 E program F program

Stadard Delay Test System
(temperature rise)

IEC/EN60898 D0 program B program

IEC/EN61008 B program

Life Testing System

IEC/EN60898 C1 program

IEC/EN61008 C1 program

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MODULAR SYSTEMS

Ensuring safe use in the most demanding environments

- Short-circuit Protection
- Overload Protection
- 960° High Temperature Flame Retardant
- IEC-60898, IEC-61008

3	Energy Limiting Class
6kA	Breaking Ability
4000	Electrical Life
10000	Mechanical Life
IP20	IP Degree

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MS8C *1P*

MS8C *2P*

MS8C *3P*

MS8C *4P*

MCB

1

MINIATURE CIRCUIT BREAKERS

MS.8 Series MCB is an all new high performance current limiting device with ability to disconnect short circuits up to 6kA.

- Thermal, for normal overload.
- Magnetic, for short circuit protection.

MS.8 Series gives you and their equipment the highest level of protection currently available. Its numerous international certifications and protection innovations mean that the **MS.8 series** exceeds even the most demanding requirements, ensuring 100% absolute safety in your terminal distribution system. The **MS.8 series** of modular power distribution systems provide you with a new, safe, flexible and simple experience.

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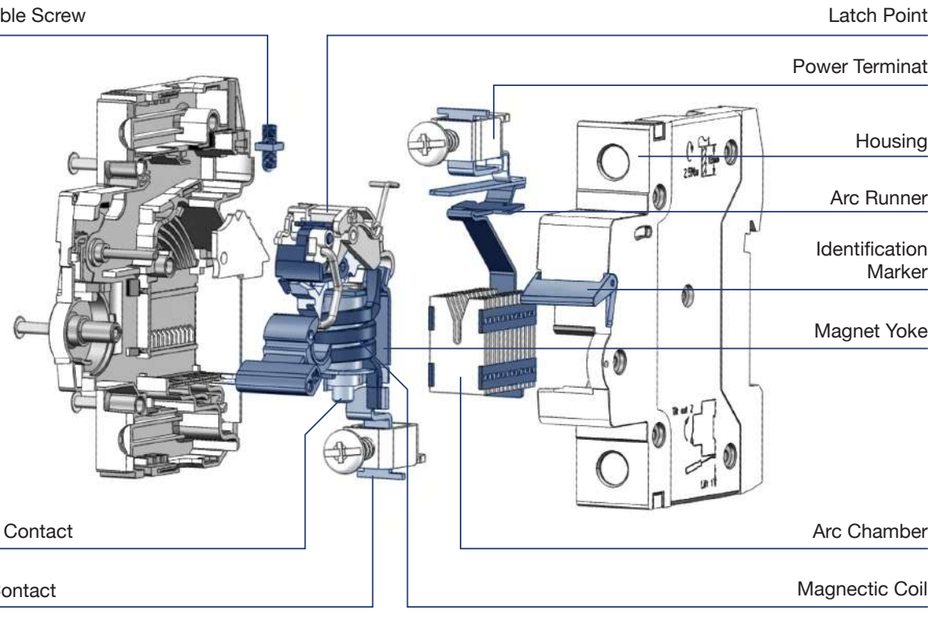
MS·8

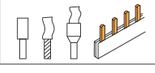
Miniature Circuit Breakers

MS8C

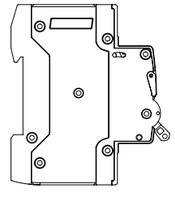
MS8N

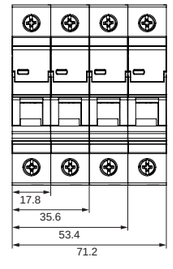
MS8DC

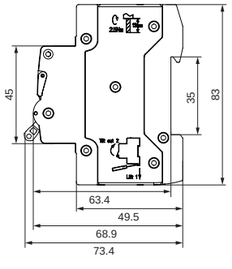


Model		MS8C	MS8N	MS8DC
Standards		IEC60898-1 GB10963.1	IEC60898-1 GB10963.1	IEC60898-1 GB10963.1
Certificate		CB, CE, NF, ROHS	CB, CE, NF, ROHS	CE, ROHS
Electrical Characteristics				
Type C		1P, 2P, 3P, 4P	1P+N, 3P+N	1P, 2P, 4P
Rating (A)		1~63	1~63	1~63
Voltage (Ue)		230/400 240/415	230/400 240/415	1P:250V 2P:500V 4P:1000V
Rated Insulation Voltage (Ui)		500	500	500
Maximum Operating Voltage (U Max)		440	440	440
Minimum Operating Voltage (U Min)		12	12	12
Operating Frequency (Hz)		50/60	50/60	-
Rated Impulse Withstand Voltage (Uimp)		6kV	6kV	6kV
Rated Short-circuit Capacity (Icn) as per IEC/EN 60898		6kA/10kA	6kA/10kA	6kA
Overvoltage Category		IV	III	IV
Energy Limiting Class		3	3	3
Magnetic Tripping	B (3In~5In)	●	●	-
	C (5In~10In)	●	●	-
	D (10In~14In)	●	●	-
	DC (7In~10In)	-	-	●
Leakage Accessory		●	●	-
Electrical Auxiliaries and Accessories		●	-	●
Electric Shock Protection Level		II	II	II
Mechanical Characteristics				
Electrical Endurance		4000	4000	4000
Mechanical Endurance		10000	10000	10000
Degree of Protection	Device only	IP20	IP20	IP20
	Device in Modular Enclosure	IP40	IP40	IP40
Other Setting Temperature		30°C	30°C	30°C
Additional Characteristics				
Terminal Form		Tunnel Type	Tunnel Type	Tunnel Type
Maximum Wiring Capability	≤25A	25	25	25
	>25A	35	25	35
Maximum Limit Torque		3.0	3.0	3.0
Contact Status Indication (Visi-safe)		●	-	●
Upper Wiring				
Lower Wiring				

Dimension(mm)







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MS8L
1P+N

MS8L
3P+N

MS8LN
1P+N

RESIDUAL CURRENT CIRCUIT BREAKER

MS.8 Series RCCB incorporate the same housing and installation features as the MCBs. With a range that includes pulse current sensitive and super immune devices, there's a unit for every application.

Advanced ergonomics and attention to detail MS.8 are designed to be noticed. We incorporated clean lines with distinctive, gently rounded shapes to give MS.8 its faultless appearance. It immediately suggests wel-designed and user friendly aesthetics and particular attention to detail. Clarity of identified circuits and elegant appearance will have your customers impressed with their outstanding installations.

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RCCB 2

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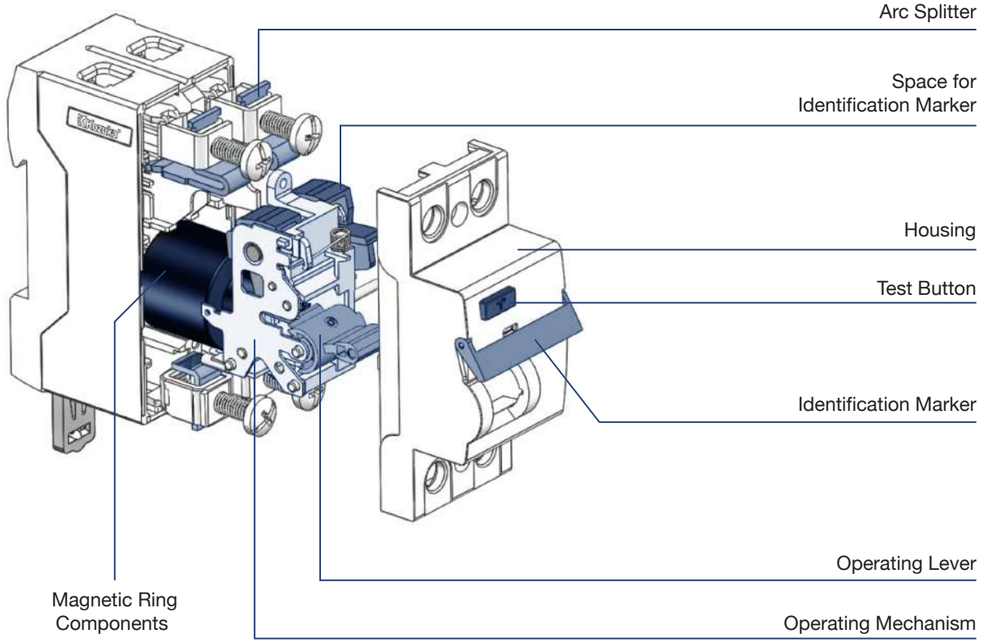
Residual Current Circuit Breaker

MS8L (2P) **MS8L (4P)** **MS8LN**



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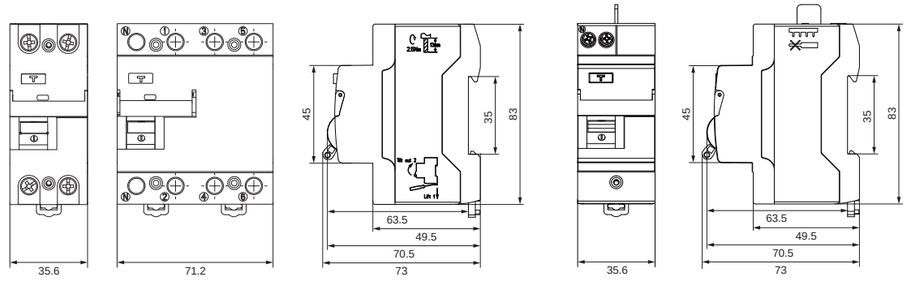
Model		MS8L (2P)	MS8L (4P)	MS8LN
Standards		IEC61008-1 GB16916	IEC61008-1 GB16916	IEC61008-1 GB16916
Certificate		CB, CE, NF, ROHS	CB, CE, NF, ROHS	CB, CE, NF, ROHS
Electrical Characteristics				
Type		1P+N	3P+N	1P+N
RCD Type		A, AC	A, AC	A, AC
Rating (A)		16~80	16~80	16~63
Sensitivity (mA)		10, 30, 100, 300, 500	30, 100, 300, 500	10, 30, 100
Voltage (Ue)		230/240	400/415	230/240
Rated Insulation Voltage (Ui)		500	500	500
Maximum Operating Voltage (U Max)		440	440	440
Residual Current Protection Type		Electromagnectic	Electromagnectic	Electromagnectic
Operating Frequency (Hz)		50/60	50/60	50/60
Rated Impulse Withstand Voltage (Uimp)		4kV	4kV	4kV
Rated Short-circuit Capacity (Icn) as per IEC/EN 61008		6kA	6kA	4.5kA
Overvoltage Category		II	II	II
Pollution Degree		2	2	2
Electrical Auxiliaries and Accessories		-	-	-
Electric Shock Protection Level		II	II	II
Mechanical Characteristics				
Electrical Endurance		4000	4000	4000
Mechanical Endurance		10000	10000	10000
Degree of Protection	Device only	IP20	IP20	IP20
	Device in Modular Enclosure	IP40	IP40	IP40
Other Setting Temperature		30°C	30°C	30°C
Additional Characteristics				
Terminal Form		Tunnel Type	Tunnel Type	Tunnel Type
Maximum Wiring Capability	≤25A	25	25	16
	>25A	35	35	16
Maximum Limit Torque	≤25A	3.0	3.0	2.0
	>25A	3.0	3.0	2.0
Contact Status Indication (Visi-safe)		-	-	-
Upper Wiring				
Lower Wiring				

Dimension(mm)



MS·8 modular systems products catalogue

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MS8NC *1P+N*

MS8NB *1P+N*

MS8NQ *1P+N*

MINIATURE CIRCUIT BREAKERS

MS.8 Series MCB is an all new high performance current limiting device with ability to disconnect short circuits up to 6kA.

- Thermal, for normal overload.
- Magnetic, for short circuit protection.

MS.8 Series gives you and their equipment the highest level of protection currently available. High quality, subtle and precise holding MS8 in your hand, you can feel the high quality. Contacts close quickly and precisely, with no hint of dubious noise. The solid fit of its components and its smooth surfaces mean, you can feel the difference even before you use it.

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MCB 3

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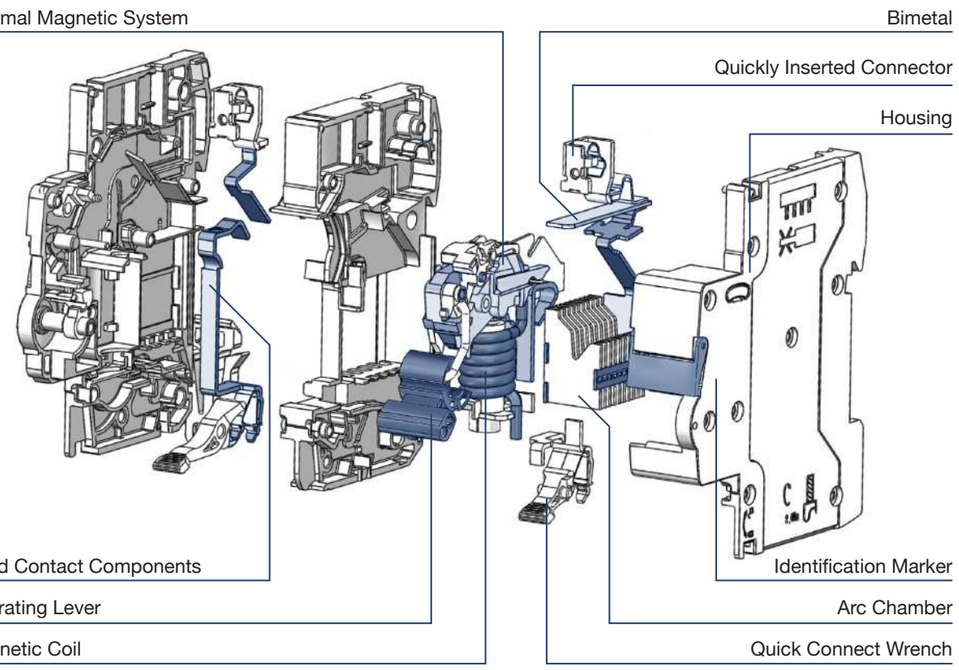
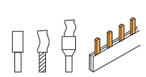
MS·8
Miniature Circuit Breakers

MS8NC

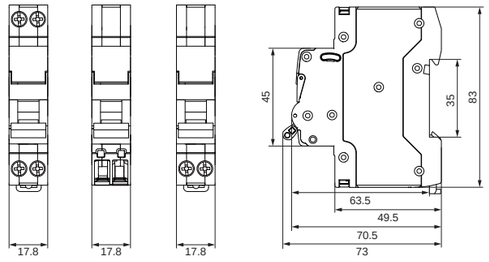
MS8NB

MS8NQ



Model		MS8NC	MS8NB	MS8NQ
Standards		IEC60898-1 GB10963.1	IEC60898-1 GB10963.1	IEC60898-1 GB10963.1
Certificate		CB, CE, NF, ROHS	CB, CE, NF, ROHS	CB, CE, NF, ROHS
Electrical Characteristics				
Type		1P+N	1P+N	1P+N
Rating (A)		2~40	2~40	2~20
Voltage (Ue)		230/400	230/400	230/400
Rated Insulation Voltage (Ui)		400	400	400
Maximum Operating Voltage (U Max)		440	440	440
Minimum Operating Voltage (U Min)		-	-	-
Operating Frequency (Hz)		50/60	50/60	50/60
Rated Impulse withstand Voltage (Uimp)		4kV	4kV	4kV
Rated Short-circuit Capacity (Icn) as per IEC/EN 60898		4.5kA	4.5kA	4.5kA
Overvoltage Category		II	II	II
Pollution Degree		2	2	2
Magnetic Tripping	B (3In~5In)	•	•	•
	C (5In~10In)	•	•	•
	D (10In~14In)	•	•	•
Leakage Accessory		•	•	•
Electrical Auxiliaries and Accessories		•	•	•
Electric Shock Protection Level		II	II	II
Mechanical Characteristics				
Electrical Endurance		4000	4000	4000
Mechanical Endurance		10000	10000	10000
Degree of Protection	Device only	IP20	IP20	IP20
	Device in Modular Enclosure	IP40	IP40	IP40
Other Setting Temperature		30°C	30°C	30°C
Additional Characteristics				
Terminal Form		Tunnel Type	Tunnel Type	Tunnel Type
Maximum Wiring Capability	≤25A	16	16	4
	>25A	16	16	
Maximum Limit Torque	≤25A	2.0	2.0	
	>25A	2.0	2.0	
Contact Status Indication (Visi-safe)		-	-	-
Upper Wiring				
Lower Wiring				

Dimension(mm)



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MOULDED CASE CIRCUIT BREAKER

MCCB 4

- Easy Installation
- Short Circuit Protection
- Overload Protection
- Variety of Wiring
- Optimizing Material
- High Breaking Capacity
- Complete Accessory

- Various product range 12.5-630A
- Reinforced breaking capacity 10-36kA (at 400V)
- Rated insulation voltage (Ui) 1000V
- Rated impulse withstand voltage (Uimp) 8KV

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Visual Safety

Indication Window

- Coloured indicators display the ON or OFF status.
- The indicators are fully covered if the breaker trips and black is the only visible colour.

Green Indicator = OFF(o)

Red Indicator = ON(I)

Without Colour = Tripped

Mounting on 35mm DIN Rail

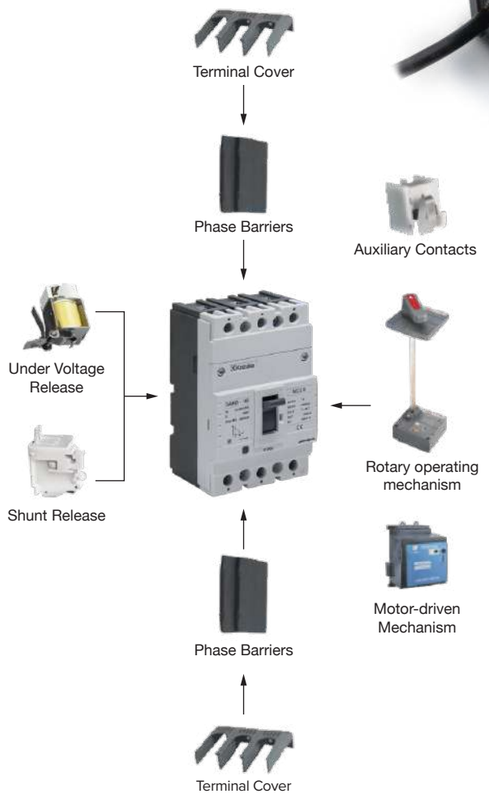
It is easily fitted to the rear of 2/3/4 pole DAM3-160 models to allow clip mounting of the MCCB to 35mm DIN rail.

Touch Safety

- The risk of touching live parts has been minimized by design. These features reduce the risk of touching live parts.
- There are no exposed metal screws on the front face.
- IP20 protection at the terminals.
- IP30 protection at the toggle.
- If the toggle is broken by accident or misuse, no live part is exposed.
- No live parts are exposed when fitting accessories.

Multiple Mounting Option

- Numerous wiring accessories are available to assist installation.
- Cable, lugs and extension terminals all available.



Arc Chamber

Very outstanding arc chamber performance to reduce arc voltage in a very short period of time.

Complete Accessory

- Shunt release
- Alarm contact
- Under voltage
- Auxiliary contact
- Handle operating
- Electrical operating
- Plug-in device
- Draw-out device
- Electrical operating mechanism

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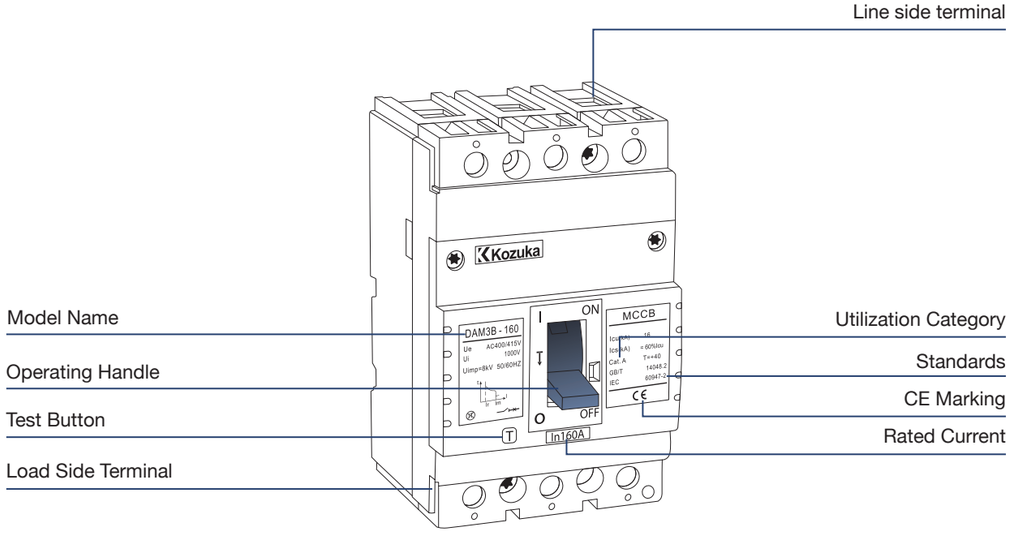
M5-8

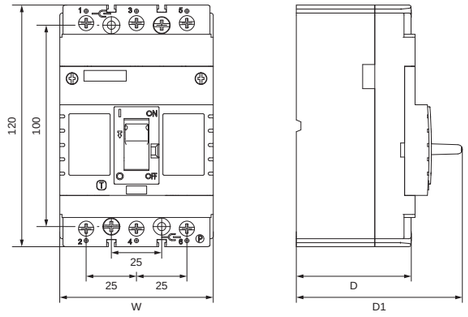
Moulded Case Circuit Breaker

DAM3B-160 (2P) **DAM3B-160 (3P)** **DAM3B-160 (4P)**



Model			DAM3B-160 (2P)	DAM3B-160 (3P)	DAM3B-160 (4P)
Number of Poles			2 Poles	3 Poles	4 Poles
Rated Current of Frame Size (Inm)		[A]	160		
Rated Current		[A]	12.5-160		
Rated Operating Voltage		AC	400/690		
		DC	250/1000		
Rated Impulse withstand Voltage (Uimp)		[KV]	8		
Rated Insulation Voltage (Ui)		[V]	1000		
Test Voltage at Industrial Frequency for 1min		[V]	3000		
Operating Frequency			50/60Hz		
Rated Ultimate Short-circuit Breaking Capacity (Icu)		**[KA]**	**A**	**B**	**C**	**N**
220/230V (AC)			16	26	36	50
400/415V (AC)			10	16	25	36
690V (AC)			3	4	8	12
250V (DC) - 2 Poles In Series			10	16	22	30
500V (DC) - 2 Poles In Series			6	8	10	12
750V (DC) - 4 Poles In Series			10	16	18	22
1000V (DC) - 4 Poles In Series			8	12	15	18
Rated Service Short-circuit Breaking Capacity (Ics)		**[KA]**				
220/230V (AC)		[%Icu]	60%	60%	60%	60%
400/415V (AC)		[%Icu]	60%	60%	60%	60%
690V (AC)		[%Icu]	60%	60%	60%	60%
Category of Utilisation			A			
Isolation Condition			■			
Reference Standard			IEC/EN 60947-2 / GB 14048.2			
Interchangeability			-			
Installation Type	Fixed		■			
	Plug-in		■			
	Draw-out		-			
Endurance	Total Cycles		10000			
	Electrical Endurance		1500			
	Mechanical Endurance		8500			
Basic Dimensions (Fixed Version)	Width (W)	[mm]	54	76	101
	Depth (D)	[mm]	59	62.5	62.5
	Depth (D1)	[mm]	78.5	82	82
Upper Wiring					
Lower Wiring					

Dimension(mm)



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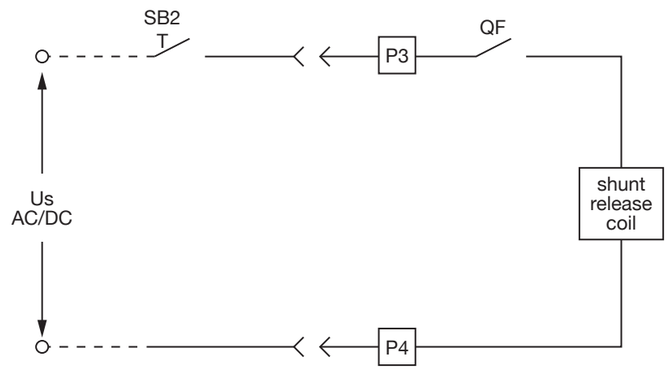
Shunt Release

The shunt release is intended for remote controlling of open of MCCB release instantaneous duty.

Characteristics

Electrical Accessories			Shunt Release	
Range of Supply Voltage			(0.7-1.1) x Us	
Rated Control Supply Voltage (Us)	Power Supply	AC 50Hz	220V	380V
		Power Loss	150VA	150VA
		DC	110V	220V
		Power Loss	150W	150W

Wiring Diagram



SB2 - opening push button (ready by user)

P3, P4 - terminal number

Us - control power

QF - auxiliary contact

*Only broken lines are connected by user, other wiring have been connected by factory, which offers user reference.

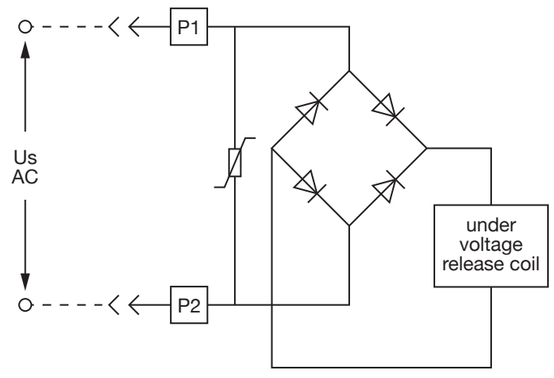
Under Voltage Release

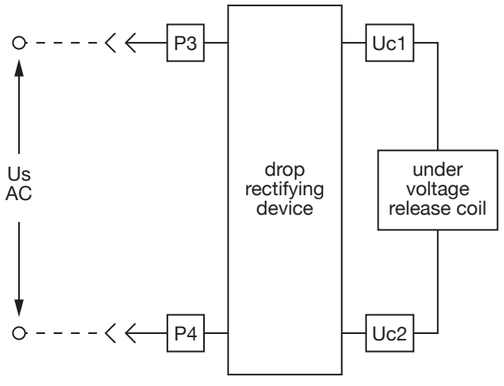
The under voltage release is intended for under voltage protection of circuit and electric equipment. Release uninterrupted duty.

Characteristics

Ue(V) Rated Operational Voltage	AC220	AC380	DC110	DC220
Operational Voltage	(0.35-0.7) x Ue			
Ensured closing voltage	(0.85-1.1) x Ue			
Ensured Non Closing Voltage	≤0.35Ue			
Power Loss	10VA		4W	

Wiring Diagram





Uc1, Uc2 - terminal number

P1, P2 - terminal number

Us - control power

63A - 1600A embeded

63A - 1600A attached

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