⚠ Reserve the right to change the parameters without prior notice

SAFE GREEN SMART

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Version： 202604 v1

MAXGE

SIGMA+

DIN rail Modular Devices

Committed to becoming a world-class manufacturer of intelligent electric

https://www.maxge.com

ABOUT US

MAXGE Electric Technology Co., LTD was founded in 2006 with a registered capital of 50 million RMB. Its headquarter is located in Deqing County, Huzhou City, Zhejiang Province. It is a large-scale comprehensive high-tech enterprise integrating design, research and development, manufacturing, marketing and service.

Since its establishment, MAXGE has been professionally oriented and committed to the design and manufacturing of a series of products such as low voltage circuit breakers & controlgear for domestic, industrial protection and new energy power distribution, in order to meet user needs and provide high-quality solutions.

Currently MAXGE has a R&D team of more than 100 engineers and nearly 1,100+ employees, equipped with state of the art automatic production lines, CNAS affiliated laboratories and testing centers. MAXGE has obtained more than 100 invention and utility model patents, 10 software copyright, and participated in the formulation of national, industry and group standards.

There are over 133,000 square meters of Modern Intelligent Manufacturing Bases in Hangzhou&Huzhou,Zhejiang and Wuhu, Anhui.

The Huzhou factory covers an area of over 33,000 square meters, with a total investment of 500 million RMB. At present, there are 42 production lines in the automation workshops, among which the automatic assembly production line, semi-automatic assembly production line and automatic inspection line cover more than 90%.

2 Smart Factories

90%+ Automation

100+ R&D Engineers

At present, MAXGE has won many honors such as National High-tech Enterprise, National Specialized and Sophisticated "Little Giant", Zhejiang Enterprise Technology Center, Zhejiang High-level Enterprise R&D Center, Zhejiang Export Brand and Zhejiang Digital Workshop.

In the process of production and operation,we have obtained ISO9001, ISO14001 and ISO45001 and obtained SGS certifications, and the testing center has won the national CNAS laboratory certification. The products have obtained CE, CB, VDE, KEMA, TUV, INTERTEK, BV, ASTA, EAC, INMETRO certifications with reliable quality, and are exported to more than 60 countries and regions such as the European Union, the South America, Middle East, Africa, and Southeast Asia. We have multiple branches in the United Kingdom, Spain, Netherlands and Hong Kong, and we are dedicated to providing high-quality products and services to global customers.

133,000 M²

Phase I smart factory
33,000 m²

Phase II smart factory
100,000 m²

CORPORATE EVENTS

MAXGE

MAXGE
SAFE GREEN SMART

Making
the best quality & cost performance Breakers

2006 ~ 2010

Brand Establishment

1.0

Founding
Wenzhou MAXGE in2006

Focused on
Circuit breaker manufacture and overseas trade

2011 ~ 2015

Thrive Period

2.0

Location
Head office in Deqing Huzhou

Focused on
Low voltage circuit breakers

Thriving
Innovation,R&D and manufacture

2016 ~ 2020

4T+5I Period

3.0

4T
· Standardization
· Automation
· Digitalization
· Intelligentization

5I
· Products Innovation
· Technology Innovation
· Management Innovation
· Marketing Innovation
· Brand Innovation

2021 ~ 2025

Comprehensive Transformation

4.0

Location
Second intelligent factory in Wuhu

Focused on
Domestic & Overseas marets

Achievement
300% increase in capacity

2026 ~ 2030

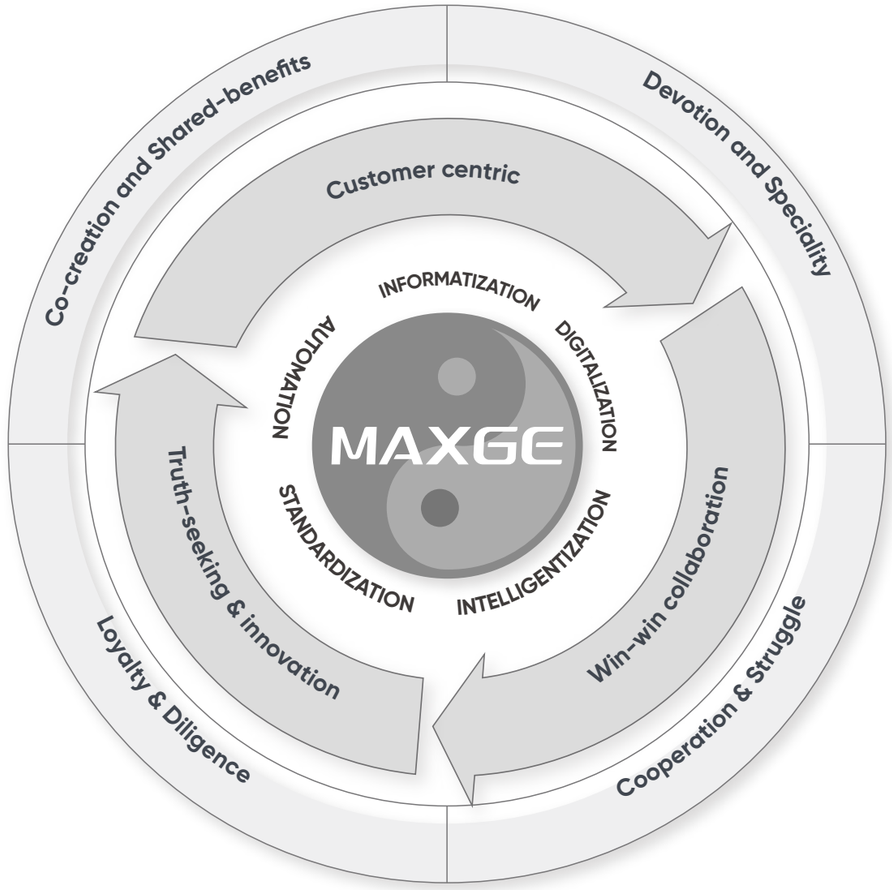
Green and Smart

5.0

Our Focus
Provides intelligent and creative electrical solutions

Mission
Make the world more safe, green and smart

CORPORATE CULTURE



SHORT-TERM VISION

Making the best quality & cost performance Breakers

LONG-TERM VISION

Committed to becoming a world-class manufacturer of intelligent electric

One flower (Lotus)

The Heart of Altruism

- Remain true to the original aspiration
- Keep the mission firmly in mind
- Link the hearts tightly
- Be upright and integrity

One tree (Bodhi tree)

The Tree of Wisdom

- “Stay Hungry”
- “Stay Foolish”
- Be wise and enlightened
- Self-growth and self-motivated

One animal (Wukong)

The Spirit of Struggle

- Keep going, never give up
- Strive continuously to strengthen oneself
- Be loyal and trustworthy
- Have ample virtue & accommodate all things

CORPORATE AWARDS

MAXGE

- National Specialized & Sophisticated "Little Giant"
- National Green factory
- National Standard Setting Enterprise
- National CNAS certified laboratory
- Vice Chairman of Circuit breakers & Similar Equipment for Household Use
- National High-tech Enterprise

- Provincial Intellectual Property Demonstration Enterprise
- Made in Zhejiang Group Standard Leading Enterprise
- Provincial High-tech Enterprise R&D Center
- Provincial Enterprise Technology Center
- Zhejiang Enterprise Research Institute
- Provincial Credit Management Demonstration Enterprise

100+
Invention Patents

7+
National Standards

10+
Software copyrights

Making the best quality & cost performance Breakers

INTELLIGENT MANUFACTURING

01 Mold & Tooling Workshop

Equipped with made in Switzerland GF AgieCharmilles, Japan Sodick wire cutting machine & EDM machine and Vertical milling CNC processing area.At present, it has achieved independent design,manufacturing and production of press tools & molds, with a comprehensive manufacturing capacity of more than 30 sets per month.Now the complete mold manufacturing process has been established, and an independent mold quality inspection group is equipped to realize the full inspection of the mold processing to ensure the precision and accuracy of mold.

02 Stamping Workshop

Equipped with high & medium speed stamping presses, and auxiliary equipment.The average punching speed can reach 100 to 300 strokes per minute, the highest punching speed can reach 500 strokes per minute, and the monthly production capacity of the workshop is to cater stamped parts for 5 millon MCB , 500K RCCB , 500K RCBO & 200K MCCB.

03 Spot Welding Workshop

Equipped with automatic coil winding machines, automatic braid compacting & cutting machines, automatic thermal and magnetic welding group assembly machines ,automatic armature assembly machines, automatic pad printing on handle and latch holder machines.The automation level is over 90%, and it is mainly responsible for the production of welding groups required by the finished product workshop.Through the integrated technology of winding and welding, automatic welding production has been realized. Thermal assembly heat treatment process is adopted to improve first pass yield during thermal verification process.

04 Injection Molding Workshop

Equipped with 50 injection molding machines from 60 to 350 ton capacity, overhead cranes and auxiliary equipment such as automatic warpage prevention machines, mould temperature controllers, granulators. The automation level is over 90%, realizing an automatic and efficient production process.Adopted centralised material feeding system to improve production efficiency and realize effective utilization of resources.Smart humidifying room, use advanced humidification process to strengthen the mechanical properties of the product.MAXGE adapts online CCD image detection unit though which critical parts of mechanism undergoes 100% inspection to ensure delatch free breakers. Through CCD image detection equipment, efficient, accurate and reliable image detection and analysis can be realized to ensure product quality.

05 ACB Automatic Testing Line

The product will go through the steps of manual assembly, contact parameters tests such as trip force, trip distance, ACB & cradle assembly by robot ,mechanical operation test unit to verify internal accessories and motor, current characteristic test unit , high voltage and loop resistance test unit, & appearance inspection by CCD device. Automation level has reached 80% and the monthly detection capacity has reached more than 1500 ACB.

06 MCCB Automatic Workshop

It mainly produces Moulded Case Circuit Breaker such as fixed type, thermal adjustable type, thermal magnetic adjustable type, electronic type, ELCB type and DC type, as well as smart molded case circuit breaker.There are currently 8 automatic production lines & 4 lean u-shaped lines and the monthly production capacity reaches 250,000 units. It has realized the automatic assembly & inspection of the whole process,including contact parameters such as automatic open distance, overtravel, on-off, synchronicity, trip force, trip distance, loop resistance, lift force & routine tests such as magnetic,thermal, reliability & HV test. Test line also equipped with laser printing & final appearance inspection by CCD device. The automation level has reached to 80%

07 MCB Automatic Workshop

It mainly produces Miniature Circuit Breakers. There are 11 automatic production lines and 4 U-shaped lean production lines. At present, the average monthly production capacity can reach about 5 million poles.Equipped with automatic assembly, laser printing, riveting, Deltach test, terminal screw test, thermal calibration, cooling, thermal verification, automatic multi-pole assembly, magnetic test, on-off test and high voltage test, plasma arc cleaning, laser marking, pad printing, din clip fixing ,automatic packaging and other equipment, the automation level is over 90%.Through magnetic test, on-off test and high voltage test, to verify the response speed of the product and ensure that the power supply can be connected or disconnected stably.Adopt double-track automatic production line to improve production efficiency, add automatic tripping force measurement unit, conduct full inspection of products, and comprehensively monitor product quality.

08 RCCB Automatic Workshop

It mainly produces magnetic relay, electronic and electromagnetic Residual Current Circuit Breakers, plastic and metal type single-phase and three-phase Distribution Boxes, Photovoltaic Combiner Boxes and controlgear products.There are 4 automatic production lines and 4 U-shaped lean production lines. At present, the average monthly production capacity can reach about 400,000 poles.The key component of RCCB named magnetic relay is produced in a clean room of class one rating & temperature, humidity conditions are maintained within standard range.Equipped with magnetic relay workshop grinding machine, finished product workshop automatic demagnetization machine, automatic calibration bench, automatic on-off and HV test machine, magnetic relay automatic winding machine and other equipment, the detection automation level has reached 80%.

09 RCBO Automatic Workshop

It mainly produces Residual Current Circuit Breaker with Over Current Protection with different variants such as 2P Electronic RCBO, DPN RCBO, 1P Electronic RCBO, multipole RCBO, electromagnetic type RCBO & Arc Fault Detection Device.There are 7 automatic production lines,2 semi-automatic production lines and 3 U-shaped lean assembly lines. At present, the average monthly production capacity can reach about 600,000 poles.Equipped with automatic riveting, Deltach test, terminal screw test, magnetic test, on-off test, high voltage test, leakage current detection, thermal calibration, cooling, thermal verification, plasma arc cleaning, laser marking, pad printing and automatic packaging and other equipment, the automation level is over 85%.

CONTENTS

CONTENTS

RCCB SERIES

Residual Current Circuit Breaker

MAXGE

Products Overview of Residual Current Protective Devices

Product name	RCCB							
Product range	SGR-100H		SGR-2		SGRi		EPRi-B	
Product picture								
Standard	IEC/EN 61008-1		IEC/EN 61008-1		IEC/EN 61008-1		IEC/EN 62423 IEC/EN 61008-1	
Number of poles	2P(1P+N)	4P(3P+N)	2P(1P+N)	4P(3P+N)	2P(1P+N)	4P(3P+N)	2P(1P+N)	4P(3P+N)
Electrical characteristics								
Rated current(A) In	16~100		16~80		25~100		16~63	
Rated voltage(V)	AC 240	AC 415	AC 240	AC 415	AC 240	AC 415	AC 240	AC 415
Rated residual current(mA)	10,30,100,300 (10mA max 25A)		10,30,100,300		30,100,300		30,100,300	
Rated conditional short-circuit current(kA)	6,10							
Tripping curve	------							
Residual current operating characteristic	AC,A,S						B	
Catalogue page NO.	03-07		08-10		11-15		16-19	

SGR-100M/H Series　Residual Current Circuit Breaker

Standard	IEC/EN 61008-1
Rated conditional short-circuit current(kA)	6,10
Rated current(A),In	16/25/40/63/80/100
Number of poles	2P(1P+N),4P(3P+N)
Rated sensitivity currents(mA),I∆n	10,30,100,300(10mA max 25A)
Rated making and breaking capacity	500A or 10 × In
Rated impulse withstand voltage Uimp(kV)	4
Rated voltage(V)	2pole　AC 240
	4pole　AC 415
Ambient temperature (℃)	-25~+40,Max.95%humidity
Environment temperature(℃)	-40℃~+60℃
Rated residual current making & breaking capacity, I∆m	500A for In=16,25,40A 630A for In=63A 800A for In=80A 1000A for In=100A
Type of trip	Electro-magnetic release
Terminal capacity	Cables up to 35mm²
Protection degree	IP20
Installation	35mm DIN rail
Residual current operating characteristic	AC/A/AC+S/A+S
Certification	

SGR-100H-2P

SGR-100H-4P

SGR-100M/H Series　Residual Current Circuit Breaker

	Rated current(A)	I∆n	Type AC	Type A	Type A+S + S	Packing unit
 SGR-100M-2P	16	10mA	SGR-100M/2/16/10	SGR-100M/2/16/10-A	SGR-100M/2/16/10-A-S	6
	25		SGR-100M/2/25/10	SGR-100M/2/25/10-A	SGR-100M/2/25/10-A-S	
	16	30mA	SGR-100M/2/16/30	SGR-100M/2/16/30-A	SGR-100M/2/16/30-A-S	
	25		SGR-100M/2/25/30	SGR-100M/2/25/30-A	SGR-100M/2/25/30-A-S	
	40		SGR-100M/2/40/30	SGR-100M/2/40/30-A	SGR-100M/2/40/30-A-S	
	63		SGR-100M/2/63/30	SGR-100M/2/63/30-A	SGR-100M/2/63/30-A-S	
	80		SGR-100M/2/80/30	SGR-100M/2/80/30-A	SGR-100M/2/80/30-A-S	
	100		SGR-100M/2/100/30	SGR-100M/2/100/30-A	SGR-100M/2/100/30-A-S	
	16	100mA	SGR-100M/2/16/100	SGR-100M/2/16/100-A	SGR-100M/2/16/100-A-S	
	25		SGR-100M/2/25/100	SGR-100M/2/25/100-A	SGR-100M/2/25/100-A-S	
	40		SGR-100M/2/40/100	SGR-100M/2/40/100-A	SGR-100M/2/40/100-A-S	
	63		SGR-100M/2/63/100	SGR-100M/2/63/100-A	SGR-100M/2/63/100-A-S	
	80		SGR-100M/2/80/100	SGR-100M/2/80/100-A	SGR-100M/2/80/100-A-S	
	100		SGR-100M/2/100/100	SGR-100M/2/100/100-A	SGR-100M/2/100/100-A-S	
	16	300mA	SGR-100M/2/16/300	SGR-100M/2/16/300-A	SGR-100M/2/16/300-A-S	
	25		SGR-100M/2/25/300	SGR-100M/2/25/300-A	SGR-100M/2/25/300-A-S	
	40		SGR-100M/2/40/300	SGR-100M/2/40/300-A	SGR-100M/2/40/300-A-S	
	63		SGR-100M/2/63/300	SGR-100M/2/63/300-A	SGR-100M/2/63/300-A-S	
	80		SGR-100M/2/80/300	SGR-100M/2/80/300-A	SGR-100M/2/80/300-A-S	
	100		SGR-100M/2/100/300	SGR-100M/2/100/300-A	SGR-100M/2/100/300-A-S	
 SGR-100M-4P	16	10mA	SGR-100M/4/16/10	SGR-100M/4/16/10-A	SGR-100M/4/16/10-A-S	3
	25		SGR-100M/4/25/10	SGR-100M/4/25/10-A	SGR-100M/4/25/10-A-S	
	16	30mA	SGR-100M/4/16/30	SGR-100M/4/16/30-A	SGR-100M/4/16/30-A-S	
	25		SGR-100M/4/25/30	SGR-100M/4/25/30-A	SGR-100M/4/25/30-A-S	
	40		SGR-100M/4/40/30	SGR-100M/4/40/30-A	SGR-100M/4/40/30-A-S	
	63		SGR-100M/4/63/30	SGR-100M/4/63/30-A	SGR-100M/4/63/30-A-S	
	80		SGR-100M/4/80/30	SGR-100M/4/80/30-A	SGR-100M/4/80/30-A-S	
	100		SGR-100M/4/100/30	SGR-100M/4/100/30-A	SGR-100M/4/100/30-A-S	
	16	100mA	SGR-100M/4/16/100	SGR-100M/4/16/100-A	SGR-100M/4/16/100-A-S	
	25		SGR-100M/4/25/100	SGR-100M/4/25/100-A	SGR-100M/4/25/100-A-S	
	40		SGR-100M/4/40/100	SGR-100M/4/40/100-A	SGR-100M/4/40/100-A-S	
	63		SGR-100M/4/63/100	SGR-100M/4/63/100-A	SGR-100M/4/63/100-A-S	
	80		SGR-100M/4/80/100	SGR-100M/4/80/100-A	SGR-100M/4/80/100-A-S	
	100		SGR-100M/4/100/100	SGR-100M/4/100/100-A	SGR-100M/4/100/100-A-S	
	16	300mA	SGR-100M/4/16/300	SGR-100M/4/16/300-A	SGR-100M/4/16/300-A-S	
	25		SGR-100M/4/25/300	SGR-100M/4/25/300-A	SGR-100M/4/25/300-A-S	
	40		SGR-100M/4/40/300	SGR-100M/4/40/300-A	SGR-100M/4/40/300-A-S	
	63		SGR-100M/4/63/300	SGR-100M/4/63/300-A	SGR-100M/4/63/300-A-S	
	80		SGR-100M/4/80/300	SGR-100M/4/80/300-A	SGR-100M/4/80/300-A-S	
	100		SGR-100M/4/100/300	SGR-100M/4/100/300-A	SGR-100M/4/100/300-A-S	

SGR-100M/H Series Residual Current Circuit Breaker

	Rated current(A)	IΔn	Type AC	Type A	Type A+S + S	Packing unit
 SGR-100H-2P	16	10mA	SGR-100H/2/16/10	SGR-100H/2/16/10-A	SGR-100H/2/16/10-A-S	6
	25		SGR-100H/2/25/10	SGR-100H/2/25/10-A	SGR-100H/2/25/10-A-S	
	16	30mA	SGR-100H/2/16/30	SGR-100H/2/16/30-A	SGR-100H/2/16/30-A-S	
	25		SGR-100H/2/25/30	SGR-100H/2/25/30-A	SGR-100H/2/25/30-A-S	
	40		SGR-100H/2/40/30	SGR-100H/2/40/30-A	SGR-100H/2/40/30-A-S	
	63		SGR-100H/2/63/30	SGR-100H/2/63/30-A	SGR-100H/2/63/30-A-S	
	80		SGR-100H/2/80/30	SGR-100H/2/80/30-A	SGR-100H/2/80/30-A-S	
	100		SGR-100H/2/100/30	SGR-100H/2/100/30-A	SGR-100H/2/100/30-A-S	
	16	100mA	SGR-100H/2/16/100	SGR-100H/2/16/100-A	SGR-100H/2/16/100-A-S	
	25		SGR-100H/2/25/100	SGR-100H/2/25/100-A	SGR-100H/2/25/100-A-S	
	40		SGR-100H/2/40/100	SGR-100H/2/40/100-A	SGR-100H/2/40/100-A-S	
	63		SGR-100H/2/63/100	SGR-100H/2/63/100-A	SGR-100H/2/63/100-A-S	
	80		SGR-100H/2/80/100	SGR-100H/2/80/100-A	SGR-100H/2/80/100-A-S	
	100		SGR-100H/2/100/100	SGR-100H/2/100/100-A	SGR-100H/2/100/100-A-S	
	16	300mA	SGR-100H/2/16/300	SGR-100H/2/16/300-A	SGR-100H/2/16/300-A-S	
	25		SGR-100H/2/25/300	SGR-100H/2/25/300-A	SGR-100H/2/25/300-A-S	
	40		SGR-100H/2/40/300	SGR-100H/2/40/300-A	SGR-100H/2/40/300-A-S	
	63		SGR-100H/2/63/300	SGR-100H/2/63/300-A	SGR-100H/2/63/300-A-S	
	80		SGR-100H/2/80/300	SGR-100H/2/80/300-A	SGR-100H/2/80/300-A-S	
	100		SGR-100H/2/100/300	SGR-100H/2/100/300-A	SGR-100H/2/100/300-A-S	
 SGR-100H-4P	16	10mA	SGR-100H/4/16/10	SGR-100H/4/16/10-A	SGR-100H/4/16/10-A-S	3
	25		SGR-100H/4/25/10	SGR-100H/4/25/10-A	SGR-100H/4/25/10-A-S	
	16	30mA	SGR-100H/4/16/30	SGR-100H/4/16/30-A	SGR-100H/4/16/30-A-S	
	25		SGR-100H/4/25/30	SGR-100H/4/25/30-A	SGR-100H/4/25/30-A-S	
	40		SGR-100H/4/40/30	SGR-100H/4/40/30-A	SGR-100H/4/40/30-A-S	
	63		SGR-100H/4/63/30	SGR-100H/4/63/30-A	SGR-100H/4/63/30-A-S	
	80		SGR-100H/4/80/30	SGR-100H/4/80/30-A	SGR-100H/4/80/30-A-S	
	100		SGR-100H/4/100/30	SGR-100H/4/100/30-A	SGR-100H/4/100/30-A-S	
	16	100mA	SGR-100H/4/16/100	SGR-100H/4/16/100-A	SGR-100H/4/16/100-A-S	
	25		SGR-100H/4/25/100	SGR-100H/4/25/100-A	SGR-100H/4/25/100-A-S	
	40		SGR-100H/4/40/100	SGR-100H/4/40/100-A	SGR-100H/4/40/100-A-S	
	63		SGR-100H/4/63/100	SGR-100H/4/63/100-A	SGR-100H/4/63/100-A-S	
	80		SGR-100H/4/80/100	SGR-100H/4/80/100-A	SGR-100H/4/80/100-A-S	
	100		SGR-100H/4/100/100	SGR-100H/4/100/100-A	SGR-100H/4/100/100-A-S	
	16	300mA	SGR-100H/4/16/300	SGR-100H/4/16/300-A	SGR-100H/4/16/300-A-S	
	25		SGR-100H/4/25/300	SGR-100H/4/25/300-A	SGR-100H/4/25/300-A-S	
	40		SGR-100H/4/40/300	SGR-100H/4/40/300-A	SGR-100H/4/40/300-A-S	
	63		SGR-100H/4/63/300	SGR-100H/4/63/300-A	SGR-100H/4/63/300-A-S	
	80		SGR-100H/4/80/300	SGR-100H/4/80/300-A	SGR-100H/4/80/300-A-S	
	100		SGR-100H/4/100/300	SGR-100H/4/100/300-A	SGR-100H/4/100/300-A-S	

SGR-100M/H Series Residual Current Circuit Breaker

Life

In	Operating cycles	
	On-load operating cycles	Off-load operating cycles
16,25,40,63,80,100	6000	4000

Breaking time of residual current

Max.breaking time						
Residual current operating characteristic	In(A)	IΔn(A)	IΔn	2 IΔn	5 IΔn	5-500A
A/AC	16/25/40/63/80/100	0.01,0.03,0.1,0.3	0.15s	0.08s	0.04s	0.04s
AC+S/A+S		0.03,0.1,0.3	0.13~0.5s	0.06~0.2s	0.05~0.15s	0.04~0.15s

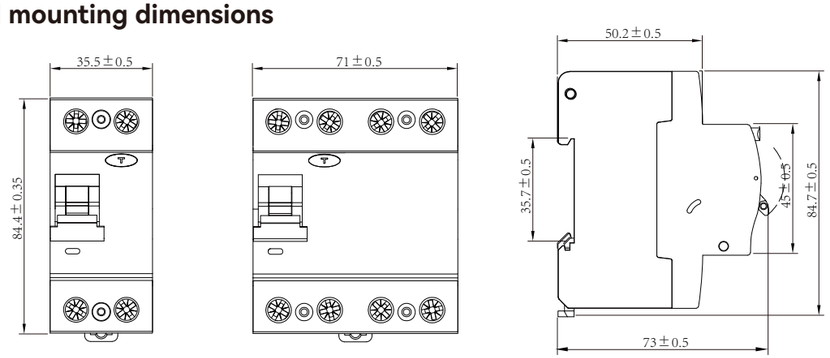
Wiring (The suitable conductors should be used for connection,see table below for relative parameters)

Rated current In (A)	Cross section area s(mm^2)	Tightening torque(N.m)
16	2.5	max 5
25	4	
40	10	
63	16	
80	25	
100	35	

Features

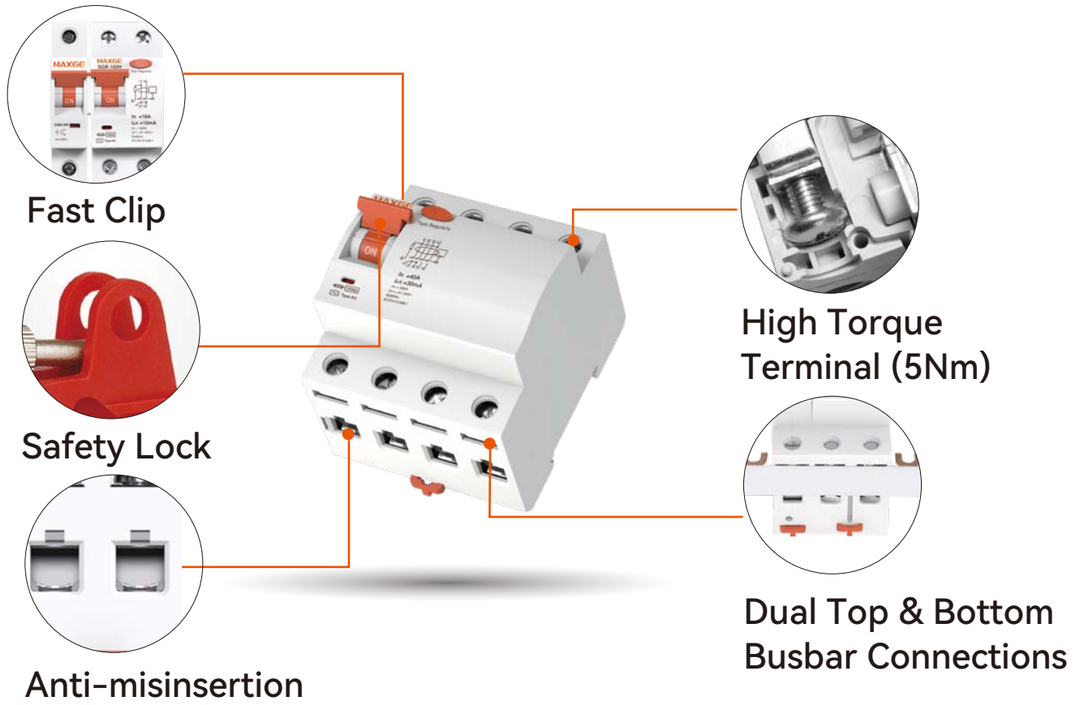
When designing residual current devices, manufacturing technology and type of routine tests, the IEC61008-1 standards were considered.Important features are:
Up to date design
User-friendly connection of conductors and busbars
Resistance to current surges; unwanted tripping excluded
Simple and solid fixing to a 35 mm mounting rail in compliance with EN 60715
Additional colour display of main contacts position (red:contacts closed, green:contacts open)

Overall and mounting dimensions



SGR-100M/H Series Residual Current Circuit Breaker

Core Advantages



Detailed Descriptions

1. Fast Clip
Simple and reliable modular design requiring no additional tools or accessories.

2. Enhanced Safety Lock
Integrated lock mechanism to prevent accidental operation and improve safety.

3. Flexible Busbar Configuration
Versatile design supports systems without a busbar, with a single busbar, or with dual busbars.

4. High Torque Terminal (5Nm)
Upgraded terminals allow for a maximum torque of 5Nm, ensuring superior connection integrity.

5. Anti-misinsertion
Unique terminal structure prevents incorrect wiring insertion.

SGR-2 Series Residual Current Circuit Breaker

Standard	EN/IEC61008-1
Rated conditional short-circuit current(kA)	6,10
Rated current(A),In	16,20,25,32,40,50,63,80
Number of poles	2P(1P+N),4P(3P+N)
Rated sensitivity currents(mA),I∆n	10,30,100,300
Rated residual non-operating current	0.5XI∆n
Rated impulse withstand voltage Uimp(kV)	4
Rated voltage(V)	2pole AC 240
	4pole AC 415
Ambient temperature (°C)	-25~+40,Max.95%humidity
Residual current off--time at I∆n	≤0.1s
Rated residual current making & breaking capacity, I∆m	500A for In=16,25,32,40,50A 630A for In=63A 800A for In=80A
Type of trip	Electro-magnetic release
Terminal capacity	Cables up to 25mm²
Protection degree	IP20
Installation	35mm DIN rail
Certification	DVE KEMA EUR CE CB

SGR-2-2P

SGR-2-4P

SGR-2 Series Residual Current Circuit Breaker

	Rated current(A)	IΔn	Type AC	Type A	Packing unit
 SGR-2-2P	16	10mA	SGR-2/2/16/10	SGR-2/2/16/10-A	6
	20		SGR-2/2/20/10	SGR-2/2/20/10-A	
	25		SGR-2/2/25/10	SGR-2/2/25/10-A	
	16	30mA	SGR-2/2/16/30	SGR-2/2/16/30-A	
	20		SGR-2/2/20/30	SGR-2/2/20/30-A	
	25		SGR-2/2/25/30	SGR-2/2/25/30-A	
	32		SGR-2/2/32/30	SGR-2/2/32/30-A	
	40		SGR-2/2/40/30	SGR-2/2/40/30-A	
	50		SGR-2/2/50/30	SGR-2/2/50/30-A	
	63		SGR-2/2/63/30	SGR-2/2/63/30-A	
	80		SGR-2/2/80/30	SGR-2/2/80/30-A	
	16	100mA	SGR-2/2/16/100	SGR-2/2/16/100-A	
	20		SGR-2/2/20/100	SGR-2/2/20/100-A	
	25		SGR-2/2/25/100	SGR-2/2/25/100-A	
	32		SGR-2/2/32/100	SGR-2/2/32/100-A	
	40		SGR-2/2/40/100	SGR-2/2/40/100-A	
	50		SGR-2/2/50/100	SGR-2/2/50/100-A	
	63		SGR-2/2/63/100	SGR-2/2/63/100-A	
	80		SGR-2/2/80/100	SGR-2/2/80/100-A	
	16	300mA	SGR-2/2/16/300	SGR-2/2/16/300-A	
	20		SGR-2/2/20/300	SGR-2/2/20/300-A	
	25		SGR-2/2/25/300	SGR-2/2/25/300-A	
	32		SGR-2/2/32/300	SGR-2/2/32/300-A	
	40		SGR-2/2/40/300	SGR-2/2/40/300-A	
	50		SGR-2/2/50/300	SGR-2/2/50/300-A	
	63		SGR-2/2/63/300	SGR-2/2/63/300-A	
	80		SGR-2/2/80/300	SGR-2/2/80/300-A	
 SGR-2-4P	16	10mA	SGR-2/4/16/10	SGR-2/4/16/10-A	3
	20		SGR-2/4/20/10	SGR-2/4/20/10-A	
	25		SGR-2/4/25/10	SGR-2/4/25/10-A	
	16	30mA	SGR-2/4/16/30	SGR-2/4/16/30-A	
	20		SGR-2/4/20/30	SGR-2/4/20/30-A	
	25		SGR-2/4/25/30	SGR-2/4/25/30-A	
	32		SGR-2/4/32/30	SGR-2/4/32/30-A	
	40		SGR-2/4/40/30	SGR-2/4/40/30-A	
	50		SGR-2/4/50/30	SGR-2/4/50/30-A	
	63		SGR-2/4/63/30	SGR-2/4/63/30-A	
	80		SGR-2/4/80/30	SGR-2/4/80/30-A	
	16	100mA	SGR-2/4/16/100	SGR-2/4/16/100-A	
	20		SGR-2/4/20/100	SGR-2/4/20/100-A	
	25		SGR-2/4/25/100	SGR-2/4/25/100-A	
	32		SGR-2/4/32/100	SGR-2/4/32/100-A	
	40		SGR-2/4/40/100	SGR-2/4/40/100-A	
	50		SGR-2/4/50/100	SGR-2/4/50/100-A	
	63		SGR-2/4/63/100	SGR-2/4/63/100-A	
	80		SGR-2/4/80/100	SGR-2/4/80/100-A	
	16	300mA	SGR-2/4/16/300	SGR-2/4/16/300-A	
	20		SGR-2/4/20/300	SGR-2/4/20/300-A	
	25		SGR-2/4/25/300	SGR-2/4/25/300-A	
	32		SGR-2/4/32/300	SGR-2/4/32/300-A	
	40		SGR-2/4/40/300	SGR-2/4/40/300-A	
	50		SGR-2/4/50/300	SGR-2/4/50/300-A	
	63		SGR-2/4/63/300	SGR-2/4/63/300-A	
	80		SGR-2/4/80/300	SGR-2/4/80/300-A	

SGR-2 Series Residual Current Circuit Breaker

Life

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

Breaking time of residual current

Max.breaking time					
In(A)	IΔn(A)	IΔn	2 IΔn	5 IΔn	5-500A
16,20,25,32,40,50,63,80	0.01,0.03,0.1,0.3	0.1s	0.08s	0.04s	0.04s

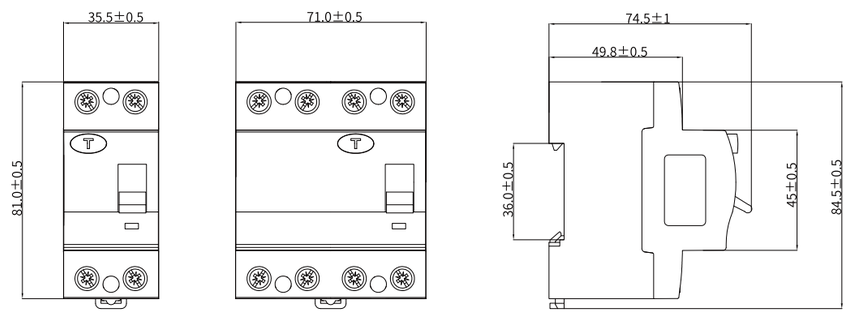
Wiring (The suitable conductors should be used for connection,see table below for relative parameters)

Rated current In (A)	Cross section area s(mm²)	Tightening torque(N.m)
16	2.5	2.5
20	2.5	
25	4	
32	6	
40	10	
50	16	
63	16	
80	25	

Features

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

Overall and mounting dimensions



SGR-2

SGRi Series	Residual Current Circuit Breaker
Standard	EN/IEC61008-1
Rated conditional short-circuit current(kA)	6,10
Rated current(A),In	25,32,40,63,80,100
Number of poles	2P(1P+N),4P(3P+N)
Rated sensitivity currents(mA),I∆n	30,100,300
Rated residual non-operating current	0.5XI∆n
Rated impulse withstand voltage Uimp(kV)	4
Rated voltage(V)	2pole AC 240
	4pole AC 415
Ambient temperature (℃)	-25~+40,Max.95%humidity
Residual current off--time at I∆n	≤0.1s
Rated residual current making & breaking capacity, I∆m	500A for In=16,25,32,40A 630A for In=63A 800A for In=80A 1000A for In=100A
Type of trip	Electro-magnetic release
Terminal capacity	Cables up to 35mm²
Protection degree	IP20
Installation	35mm DIN rail
Certification	Intertek CE CB

SGRi-2P

SGRi-4P

SGRi Series	Residual Current Circuit Breaker			
	Rated current(A)	I∆n	Type AC+S ⏦+Ⓢ	Packing unit
SGRi-2P  ⏦+Ⓢ	25	30mA	SGRi-2/25/30-S	6
	32		SGRi-2/32/30-S	
	40		SGRi-2/40/30-S	
	63		SGRi-2/63/30-S	
	80		SGRi-2/80/30-S	
	100		SGRi-2/100/30-S	
	25	100mA	SGRi-2/25/100-S	
	32		SGRi-2/32/100-S	
	40		SGRi-2/40/100-S	
	63		SGRi-2/63/100-S	
	80		SGRi-2/80/100-S	
	100		SGRi-2/100/100-S	
	25	300mA	SGRi-2/25/300-S	
	32		SGRi-2/32/300-S	
	40		SGRi-2/40/300-S	
	63		SGRi-2/63/300-S	
	80		SGRi-2/80/300-S	
	100		SGRi-2/100/300-S	
SGRi-4P  ⏦+Ⓢ	25	30mA	SGRi-4/25/30-S	3
	32		SGRi-4/32/30-S	
	40		SGRi-4/40/30-S	
	63		SGRi-4/63/30-S	
	80		SGRi-4/80/30-S	
	100		SGRi-4/100/30-S	
	25	100mA	SGRi-4/25/100-S	
	32		SGRi-4/32/100-S	
	40		SGRi-4/40/100-S	
	63		SGRi-4/63/100-S	
	80		SGRi-4/80/100-S	
	100		SGRi-4/100/100-S	
	25	300mA	SGRi-4/25/300-S	
	32		SGRi-4/32/300-S	
	40		SGRi-4/40/300-S	
	63		SGRi-4/63/300-S	
	80		SGRi-4/80/300-S	
	100		SGRi-4/100/300-S	

SGRi Series Residual Current Circuit Breaker

	Rated current(A)	IΔn	Type A+S ⩙+Ⓢ	Packing unit
SGRi-2P  ⩙+Ⓢ	25	30mA	SGRi-2/25/30-A-S	6
	32		SGRi-2/32/30-A-S	
	40		SGRi-2/40/30-A-S	
	63		SGRi-2/63/30-A-S	
	80		SGRi-2/80/30-A-S	
	100		SGRi-2/100/30-A-S	
	25	100mA	SGRi-2/25/100-A-S	
	32		SGRi-2/32/100-A-S	
	40		SGRi-2/40/100-A-S	
	63		SGRi-2/63/100-A-S	
	80		SGRi-2/80/100-A-S	
	100		SGRi-2/100/100-A-S	
	25	300mA	SGRi-2/25/300-A-S	
	32		SGRi-2/32/300-A-S	
	40		SGRi-2/40/300-A-S	
	63		SGRi-2/63/300-A-S	
	80		SGRi-2/80/300-A-S	
	100		SGRi-2/100/300-A-S	
SGRi-4P  ⩙+Ⓢ	25	30mA	SGRi-4/25/30-A-S	3
	32		SGRi-4/32/30-A-S	
	40		SGRi-4/40/30-A-S	
	63		SGRi-4/63/30-A-S	
	80		SGRi-4/80/30-A-S	
	100		SGRi-4/100/30-A-S	
	25	100mA	SGRi-4/25/100-A-S	
	32		SGRi-4/32/100-A-S	
	40		SGRi-4/40/100-A-S	
	63		SGRi-4/63/100-A-S	
	80		SGRi-4/80/100-A-S	
	100		SGRi-4/100/100-A-S	
	25	300mA	SGRi-4/25/300-A-S	
	32		SGRi-4/32/300-A-S	
	40		SGRi-4/40/300-A-S	
	63		SGRi-4/63/300-A-S	
	80		SGRi-4/80/300-A-S	
	100		SGRi-4/100/300-A-S	

SGRi Series Residual Current Circuit Breaker

	Rated current(A)	IΔn	Type AC ⩙	Type A ⩙	Packing unit
SGRi-2P 	25	30mA	SGRi-2/25/30	SGRi-2/25/30-A	6
	32		SGRi-2/32/30	SGRi-2/32/30-A	
	40		SGRi-2/40/30	SGRi-2/40/30-A	
	63		SGRi-2/63/30	SGRi-2/63/30-A	
	80		SGRi-2/80/30	SGRi-2/80/30-A	
	100		SGRi-2/100/30	SGRi-2/100/30-A	
	25	100mA	SGRi-2/25/100	SGRi-2/25/100-A	
	32		SGRi-2/32/100	SGRi-2/32/100-A	
	40		SGRi-2/40/100	SGRi-2/40/100-A	
	63		SGRi-2/63/100	SGRi-2/63/100-A	
	80		SGRi-2/80/100	SGRi-2/80/100-A	
	100		SGRi-2/100/100	SGRi-2/100/100-A	
	25	300mA	SGRi-2/25/300	SGRi-2/25/300-A	
	32		SGRi-2/32/300	SGRi-2/32/300-A	
	40		SGRi-2/40/300	SGRi-2/40/300-A	
	63		SGRi-2/63/300	SGRi-2/63/300-A	
	80		SGRi-2/80/300	SGRi-2/80/300-A	
	100		SGRi-2/100/300	SGRi-2/100/300-A	
SGRi-4P 	25	30mA	SGRi-4/25/30	SGRi-4/25/30-A	3
	32		SGRi-4/32/30	SGRi-4/32/30-A	
	40		SGRi-4/40/30	SGRi-4/40/30-A	
	63		SGRi-4/63/30	SGRi-4/63/30-A	
	80		SGRi-4/80/30	SGRi-4/80/30-A	
	100		SGRi-4/100/30	SGRi-4/100/30-A	
	25	100mA	SGRi-4/25/100	SGRi-4/25/100-A	
	32		SGRi-4/32/100	SGRi-4/32/100-A	
	40		SGRi-4/40/100	SGRi-4/40/100-A	
	63		SGRi-4/63/100	SGRi-4/63/100-A	
	80		SGRi-4/80/100	SGRi-4/80/100-A	
	100		SGRi-4/100/100	SGRi-4/100/100-A	
	25	300mA	SGRi-4/25/300	SGRi-4/25/300-A	
	32		SGRi-4/32/300	SGRi-4/32/300-A	
	40		SGRi-4/40/300	SGRi-4/40/300-A	
	63		SGRi-4/63/300	SGRi-4/63/300-A	
	80		SGRi-4/80/300	SGRi-4/80/300-A	
	100		SGRi-4/100/300	SGRi-4/100/300-A	

SGRi Series Residual Current Circuit Breaker

Life

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

Breaking time of residual current

Max.breaking time						
Leakage type	In(A)	I∆n(A)	I∆n	2 I∆n	5 I∆n	5-500A
A,AC	25,32,40,63,80,100	0.03,0.1,0.3	0.1s	0.08s	0.04s	0.04s
S		0.1,0.3	0.13s-0.5s	0.06s-0.2s	0.05s-0.15s	0.05s-0.15s

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

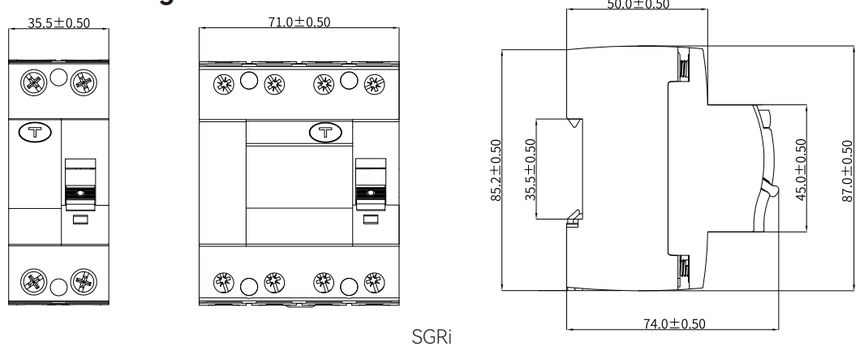
Rated current In (A)	Cross section area s(mm²)	Tightening torque(N.m)
25	4	2.5
32	6	
40	10	
63	16	
80	25	
100	35	

Features

When designing residual current devices, manufacturing technology and type of routine tests, the IEC / EN 61008-1 standards were considered.Important features are:
Up to date design
User-friendly connection of conductors and busbars
Resistance to current surges; unwanted tripping excluded
Simple and solid fixing to a 35 mm mounting rail in compliance with EN 60715
Additional colour display of main contacts position (red:contacts closed, green:contacts open)
Type S🅂:Selective type, RCD with non-operation time of atleast 40 ms

- ·High resistance to peak current up to 5 kA (IEC standardsrequire 3 kA).
- ·Meets conditions for tripping time 0.4 or 0.2 s (automatic disconnection).
- ·Type S is used as main circuit breaker or in combinationwith class II (C) surge voltage protectors.
- ·Significantly reduces unwanted trippings.

Overall and mounting dimensions



SGRi

RCCB Type B
EPRi-B Series

- High reliability
- Switched Neutral
- EV Charging & Solar PV Application
- Tripping Under AC,Pulsating & Smooth DC Currents
- Protection against direct/indirect contact

Charging Station

EPRi-B Series	Residual Current Circuit Breaker
Standard	EN/IEC 62423 IEC/EN 61008-1
Rated conditional short-circuit current(kA)	6,10
Rated current(A),In	16,25,32,40,50,63
Number of poles	2P(1P+N),4P(3P+N)
Rated sensitivity currents(mA),I∆n	30,100,300
Rated residual non-operating current	0.5XI∆n
Rated impulse withstand voltage Uimp(kV)	4
Rated voltage(V)	2pole AC 230/240
	4pole AC 400/415
Ambient temperature (℃)	-25~+40,Max.95%humidity
Residual current off--time at I∆n	≤0.1s
Rated residual current making & breaking capacity, I∆m	500A for In=16,25,32,40A 630A for In=63A
Type of trip	Electro-magnetic release
Terminal capacity	Cables up to 35mm²
Protection degree	IP20
Installation	35mm DIN rail
Certification	CE CB

EPRi-B-2P

EPRi-B-4P

EPRi-B Series	Residual Current Circuit Breaker			
	Rated current(A)	I∆n	B Type	Packing unit
 EPRi-B-2P	16	30mA	EPRi-B/2/16/30	6
	25		EPRi-B/2/25/30	
	32		EPRi-B/2/32/30	
	40		EPRi-B/2/40/30	
	50		EPRi-B/2/50/30	
	63		EPRi-B/2/63/30	
	16	100mA	EPRi-B/2/16/100	
	25		EPRi-B/2/25/100	
	32		EPRi-B/2/32/100	
	40		EPRi-B/2/40/100	
	50		EPRi-B/2/50/100	
	63		EPRi-B/2/63/100	
	16	300mA	EPRi-B/2/16/300	
	25		EPRi-B/2/25/300	
	32		EPRi-B/2/32/300	
	40		EPRi-B/2/40/300	
	50		EPRi-B/2/50/300	
	63		EPRi-B/2/63/300	
 EPRi-B-4P	16	30mA	EPRi-B/4/16/30	3
	25		EPRi-B/4/25/30	
	32		EPRi-B/4/32/30	
	40		EPRi-B/4/40/30	
	50		EPRi-B/4/50/30	
	63		EPRi-B/4/63/30	
	16	100mA	EPRi-B/4/16/100	
	25		EPRi-B/4/25/100	
	32		EPRi-B/4/32/100	
	40		EPRi-B/4/40/100	
	50		EPRi-B/4/50/100	
	63		EPRi-B/4/63/100	
	16	300mA	EPRi-B/4/16/300	
	25		EPRi-B/4/25/300	
	32		EPRi-B/4/32/300	
	40		EPRi-B/4/40/300	
	50		EPRi-B/4/50/300	
	63		EPRi-B/4/63/300	

EPRi-B Series　　Residual Current Circuit Breaker

Life

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

Breaking time of residual current

Max.breaking time					
In(A)	I∆n(A)	I∆n	2 I∆n	5 I∆n	5-500A
16,25,32,40,50,63	0.03,0.1,0.3	0.1s	0.08s	0.04s	0.04s

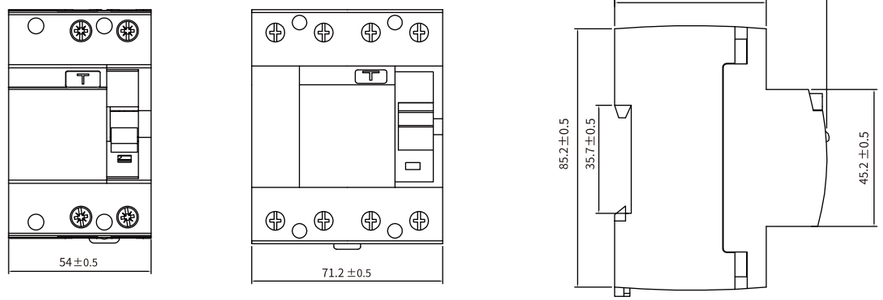
Wiring (The suitable conductors should be used for connection,see table below for relative parameters)

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

Features

When designing residual current devices, manufacturing technology and type of routine tests, the IEC / EN 62423 standards were considered.Important features are:
Up to date design
User-friendly connection of conductors and busbars
Resistance to current surges; unwanted tripping excluded
Simple and solid fixing to a 35 mm mounting rail
Additional colour display of main contacts position (red:contacts closed, green:contacts open)

Overall and mounting dimensions



EPRi-B

RCBO SERIES

Residual Current Circuit Breakers with Overcurrent Protection

Products Overview of Residual Current Protective Devices

Product name	RCBO			
Product range	SGMR-40D	SGBR-63M/H	SGRM-63LE	SGBRi-6K/10K
Product picture				
Standard	IEC/EN 61009-1			
Number of poles	2P/3P+N	1P+N	1P+N,2P,3P.3P+N,4P	1P+N
Electrical characteristics				
Rated current(A) In	6~40	6~63		6~40
Rated voltage(V)	230/240Vac for 2P,1P+N 400/415Vac for 3P+N		1P+N, 2P: AC 230 3P, 3P+N, 4P:AC 400	AC 230/240
Rated residual current(mA)	30,100,300	10,30,100,300		
Rated conditional short-circuit current(kA)	6,10(2P) 6(3P+N)	6,10	6	6,10
Tripping curve	B,C			
Residual current operating characteristic	AC,A,A+G	AC,A		
Catalogue page NO.	23-28	29-32	33-44	45-48

Products Overview of Residual Current Protective Devices

Product name	RCBO			
Product range	SGBR-40L	SGBR-32M/H	SGBR-40AFD	SGBR2-40AFD
Product picture				
Standard	IEC/EN 61009-1		IEC/EN 62606,IEC/EN 61009-1	
Number of poles	1P+N	1P+N	1P+N	1P+N
Electrical characteristics				
Rated current(A) In	6~40	6~32	6~40	
Rated voltage(V)	AC 230/240			
Rated residual current(mA)	10,30,100,300			
Rated conditional short-circuit current(kA)	6,10	4.5,6	6	6,10
Tripping curve	B,C			
Residual current operating characteristic	AC,A			
Catalogue page NO.	49-51	52-55	57-59	60-63

SGMR-40D Series Residual Current Circuit Breakers with Overcurrent Protection

Standard		EN/IEC 61009-1
Rated conditional short-circuit current(kA)		6,10
Rated current(A),In		6,10,13,15,16,20,25,32,40
Number of poles		2P/3P+N
Rated sensitivity currents(mA),I∆n		30,100,300
Tripping curve		B,C
Rated residual non-operating current		0.5XI∆n
Rated impulse withstand voltage Uimp(kV)		4
Rated voltage(V)		AC 230/240
Ambient temperature (℃)		-25~+40,Max.95%humidity
Residual current off time		≤0.1s
Type of trip	Ground fault	Electro-magnetic
	Over current	Thermal-magnetic
Electrical endurance		4000
Mechanical endurance		10000
Terminal capacity		16mm² flexible/25mm² rigid
Protection degree		IP20
Installation		35mm DIN rail

SGMR-40D 2P

SGMR-40D 3P+N

SGMR-40D Series Residual Current Circuit Breakers with Overcurrent Protection

	Rated current(A)	I∆n	Type AC B curve	Type AC C curve	Type A B curve	Type A C curve	Packing unit
 Type AC	6	30mA	SGMR-40D-2/B6/30	SGMR-40D-2/C6/30	SGMR-40D-2/B6/30-A	SGMR-40D-2/C6/30-A	6
	10		SGMR-40D-2/B10/30	SGMR-40D-2/C10/30	SGMR-40D-2/B10/30-A	SGMR-40D-2/C10/30-A	
	13		SGMR-40D-2/B13/30	SGMR-40D-2/C13/30	SGMR-40D-2/B13/30-A	SGMR-40D-2/C13/30-A	
	15		SGMR-40D-2/B15/30	SGMR-40D-2/C15/30	SGMR-40D-2/B15/30-A	SGMR-40D-2/C15/30-A	
	16		SGMR-40D-2/B16/30	SGMR-40D-2/C16/30	SGMR-40D-2/B16/30-A	SGMR-40D-2/C16/30-A	
	20		SGMR-40D-2/B20/30	SGMR-40D-2/C20/30	SGMR-40D-2/B20/30-A	SGMR-40D-2/C20/30-A	
	25		SGMR-40D-2/B25/30	SGMR-40D-2/C25/30	SGMR-40D-2/B25/30-A	SGMR-40D-2/C25/30-A	
	32		SGMR-40D-2/B32/30	SGMR-40D-2/C32/30	SGMR-40D-2/B32/30-A	SGMR-40D-2/C32/30-A	
	40		SGMR-40D-2/B40/30	SGMR-40D-2/C40/30	SGMR-40D-2/B40/30-A	SGMR-40D-2/C40/30-A	
	6	100mA	SGMR-40D-2/B6/100	SGMR-40D-2/C6/100	SGMR-40D-2/B6/100-A	SGMR-40D-2/C6/100-A	
	10		SGMR-40D-2/B10/100	SGMR-40D-2/C10/100	SGMR-40D-2/B10/100-A	SGMR-40D-2/C10/100-A	
	13		SGMR-40D-2/B13/100	SGMR-40D-2/C13/100	SGMR-40D-2/B13/100-A	SGMR-40D-2/C13/100-A	
	15		SGMR-40D-2/B15/100	SGMR-40D-2/C15/100	SGMR-40D-2/B15/100-A	SGMR-40D-2/C15/100-A	
	16		SGMR-40D-2/B16/100	SGMR-40D-2/C16/100	SGMR-40D-2/B16/100-A	SGMR-40D-2/C16/100-A	
	20		SGMR-40D-2/B20/100	SGMR-40D-2/C20/100	SGMR-40D-2/B20/100-A	SGMR-40D-2/C20/100-A	
	25		SGMR-40D-2/B25/100	SGMR-40D-2/C25/100	SGMR-40D-2/B25/100-A	SGMR-40D-2/C25/100-A	
	32		SGMR-40D-2/B32/100	SGMR-40D-2/C32/100	SGMR-40D-2/B32/100-A	SGMR-40D-2/C32/100-A	
	40		SGMR-40D-2/B40/100	SGMR-40D-2/C40/100	SGMR-40D-2/B40/100-A	SGMR-40D-2/C40/100-A	
 Type A	6	300mA	SGMR-40D-2/B6/300	SGMR-40D-2/C6/300	SGMR-40D-2/B6/300-A	SGMR-40D-2/C6/300-A	
	10		SGMR-40D-2/B10/300	SGMR-40D-2/C10/300	SGMR-40D-2/B10/300-A	SGMR-40D-2/C10/300-A	
	13		SGMR-40D-2/B13/300	SGMR-40D-2/C13/300	SGMR-40D-2/B13/300-A	SGMR-40D-2/C13/300-A	
	15		SGMR-40D-2/B15/300	SGMR-40D-2/C15/300	SGMR-40D-2/B15/300-A	SGMR-40D-2/C15/300-A	
	16		SGMR-40D-2/B16/300	SGMR-40D-2/C16/300	SGMR-40D-2/B16/300-A	SGMR-40D-2/C16/300-A	
	20		SGMR-40D-2/B20/300	SGMR-40D-2/C20/300	SGMR-40D-2/B20/300-A	SGMR-40D-2/C20/300-A	
	25		SGMR-40D-2/B25/300	SGMR-40D-2/C25/300	SGMR-40D-2/B25/300-A	SGMR-40D-2/C25/300-A	
	32		SGMR-40D-2/B32/300	SGMR-40D-2/C32/300	SGMR-40D-2/B32/300-A	SGMR-40D-2/C32/300-A	
	40		SGMR-40D-2/B40/300	SGMR-40D-2/C40/300	SGMR-40D-2/B40/300-A	SGMR-40D-2/C40/300-A	

SGMR-40D Series Residual Current Circuit Breakers with Overcurrent Protection

	Rated current(A)	IΔn	Type A+G G		Packing unit
			B curve	C curve	
 Type A+G G	6	30mA	SGMR-40D-2/B6/30-A+G	SGMR-40D-2/C6/30-A+G	6
	10		SGMR-40D-2/B10/30-A+G	SGMR-40D-2/C10/30-A+G	
	13		SGMR-40D-2/B13/30-A+G	SGMR-40D-2/C13/30-A+G	
	15		SGMR-40D-2/B15/30-A+G	SGMR-40D-2/C15/30-A+G	
	16		SGMR-40D-2/B16/30-A+G	SGMR-40D-2/C16/30-A+G	
	20		SGMR-40D-2/B20/30-A+G	SGMR-40D-2/C20/30-A+G	
	25		SGMR-40D-2/B25/30-A+G	SGMR-40D-2/C25/30-A+G	
	32		SGMR-40D-2/B32/30-A+G	SGMR-40D-2/C32/30-A+G	
	40		SGMR-40D-2/B40/30-A+G	SGMR-40D-2/C40/30-A+G	
	6	100mA	SGMR-40D-2/B6/100-A+G	SGMR-40D-2/C6/100-A+G	
	10		SGMR-40D-2/B10/100-A+G	SGMR-40D-2/C10/100-A+G	
	13		SGMR-40D-2/B13/100-A+G	SGMR-40D-2/C13/100-A+G	
	15		SGMR-40D-2/B15/100-A+G	SGMR-40D-2/C15/100-A+G	
	16		SGMR-40D-2/B16/100-A+G	SGMR-40D-2/C16/100-A+G	
	20		SGMR-40D-2/B20/100-A+G	SGMR-40D-2/C20/100-A+G	
	25		SGMR-40D-2/B25/100-A+G	SGMR-40D-2/C25/100-A+G	
	32		SGMR-40D-2/B32/100-A+G	SGMR-40D-2/C32/100-A+G	
	40		SGMR-40D-2/B40/100-A+G	SGMR-40D-2/C40/100-A+G	
	6	300mA	SGMR-40D-2/B6/300-A+G	SGMR-40D-2/C6/300-A+G	
	10		SGMR-40D-2/B10/300-A+G	SGMR-40D-2/C10/300-A+G	
	13		SGMR-40D-2/B13/300-A+G	SGMR-40D-2/C13/300-A+G	
	15		SGMR-40D-2/B15/300-A+G	SGMR-40D-2/C15/300-A+G	
	16		SGMR-40D-2/B16/300-A+G	SGMR-40D-2/C16/300-A+G	
	20		SGMR-40D-2/B20/300-A+G	SGMR-40D-2/C20/300-A+G	
	25		SGMR-40D-2/B25/300-A+G	SGMR-40D-2/C25/300-A+G	
	32		SGMR-40D-2/B32/300-A+G	SGMR-40D-2/C32/300-A+G	
	40		SGMR-40D-2/B40/300-A+G	SGMR-40D-2/C40/300-A+G	

SGMR-40D Series Residual Current Circuit Breakers with Overcurrent Protection

	Rated current(A)	IΔn	Type AC		Type A		Packing unit
			B curve	C curve	B curve	C curve	
Type AC	6	30mA	SGMR-40D-4/B6/30	SGMR-40D-4/C6/30	SGMR-40D-4/B6/30-A	SGMR-40D-4/C6/30-A	3
	10		SGMR-40D-4/B10/30	SGMR-40D-4/C10/30	SGMR-40D-4/B10/30-A	SGMR-40D-4/C10/30-A	
	13		SGMR-40D-4/B13/30	SGMR-40D-4/C13/30	SGMR-40D-4/B13/30-A	SGMR-40D-4/C13/30-A	
	15		SGMR-40D-4/B15/30	SGMR-40D-4/C15/30	SGMR-40D-4/B15/30-A	SGMR-40D-4/C15/30-A	
	16		SGMR-40D-4/B16/30	SGMR-40D-4/C16/30	SGMR-40D-4/B16/30-A	SGMR-40D-4/C16/30-A	
	20		SGMR-40D-4/B20/30	SGMR-40D-4/C20/30	SGMR-40D-4/B20/30-A	SGMR-40D-4/C20/30-A	
	25		SGMR-40D-4/B25/30	SGMR-40D-4/C25/30	SGMR-40D-4/B25/30-A	SGMR-40D-4/C25/30-A	
	32		SGMR-40D-4/B32/30	SGMR-40D-4/C32/30	SGMR-40D-4/B32/30-A	SGMR-40D-4/C32/30-A	
	40		SGMR-40D-4/B40/30	SGMR-40D-4/C40/30	SGMR-40D-4/B40/30-A	SGMR-40D-4/C40/30-A	
	6	100mA	SGMR-40D-4/B6/100	SGMR-40D-4/C6/100	SGMR-40D-4/B6/100-A	SGMR-40D-4/C6/100-A	
	10		SGMR-40D-4/B10/100	SGMR-40D-4/C10/100	SGMR-40D-4/B10/100-A	SGMR-40D-4/C10/100-A	
	13		SGMR-40D-4/B13/100	SGMR-40D-4/C13/100	SGMR-40D-4/B13/100-A	SGMR-40D-4/C13/100-A	
	15		SGMR-40D-4/B15/100	SGMR-40D-4/C15/100	SGMR-40D-4/B15/100-A	SGMR-40D-4/C15/100-A	
	16		SGMR-40D-4/B16/100	SGMR-40D-4/C16/100	SGMR-40D-4/B16/100-A	SGMR-40D-4/C16/100-A	
	20		SGMR-40D-4/B20/100	SGMR-40D-4/C20/100	SGMR-40D-4/B20/100-A	SGMR-40D-4/C20/100-A	
	25		SGMR-40D-4/B25/100	SGMR-40D-4/C25/100	SGMR-40D-4/B25/100-A	SGMR-40D-4/C25/100-A	
	32		SGMR-40D-4/B32/100	SGMR-40D-4/C32/100	SGMR-40D-4/B32/100-A	SGMR-40D-4/C32/100-A	
	40		SGMR-40D-4/B40/100	SGMR-40D-4/C40/100	SGMR-40D-4/B40/100-A	SGMR-40D-4/C40/100-A	
 Type A	6	300mA	SGMR-40D-4/B6/300	SGMR-40D-4/C6/300	SGMR-40D-4/B6/300-A	SGMR-40D-4/C6/300-A	
	10		SGMR-40D-4/B10/300	SGMR-40D-4/C10/300	SGMR-40D-4/B10/300-A	SGMR-40D-4/C10/300-A	
	13		SGMR-40D-4/B13/300	SGMR-40D-4/C13/300	SGMR-40D-4/B13/300-A	SGMR-40D-4/C13/300-A	
	15		SGMR-40D-4/B15/300	SGMR-40D-4/C15/300	SGMR-40D-4/B15/300-A	SGMR-40D-4/C15/300-A	
	16		SGMR-40D-4/B16/300	SGMR-40D-4/C16/300	SGMR-40D-4/B16/300-A	SGMR-40D-4/C16/300-A	
	20		SGMR-40D-4/B20/300	SGMR-40D-4/C20/300	SGMR-40D-4/B20/300-A	SGMR-40D-4/C20/300-A	
	25		SGMR-40D-4/B25/300	SGMR-40D-4/C25/300	SGMR-40D-4/B25/300-A	SGMR-40D-4/C25/300-A	
	32		SGMR-40D-4/B32/300	SGMR-40D-4/C32/300	SGMR-40D-4/B32/300-A	SGMR-40D-4/C32/300-A	
	40		SGMR-40D-4/B40/300	SGMR-40D-4/C40/300	SGMR-40D-4/B40/300-A	SGMR-40D-4/C40/300-A	

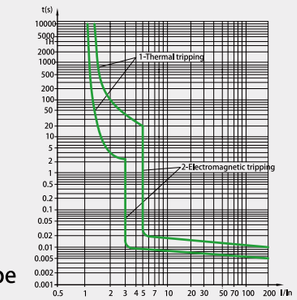
SGMR-40D Series Residual Current Circuit Breakers with Overcurrent Protection

	Rated current(A)	IΔn	Type A+G G		Packing unit
			B curve	C curve	
 Type A+G G	6	30mA	SGMR-40D-4/B6/30-A+G	SGMR-40D-4/C6/30-A+G	3
	10		SGMR-40D-4/B10/30-A+G	SGMR-40D-4/C10/30-A+G	
	13		SGMR-40D-4/B13/30-A+G	SGMR-40D-4/C13/30-A+G	
	15		SGMR-40D-4/B15/30-A+G	SGMR-40D-4/C15/30-A+G	
	16		SGMR-40D-4/B16/30-A+G	SGMR-40D-4/C16/30-A+G	
	20		SGMR-40D-4/B20/30-A+G	SGMR-40D-4/C20/30-A+G	
	25		SGMR-40D-4/B25/30-A+G	SGMR-40D-4/C25/30-A+G	
	32		SGMR-40D-4/B32/30-A+G	SGMR-40D-4/C32/30-A+G	
	40		SGMR-40D-4/B40/30-A+G	SGMR-40D-4/C40/30-A+G	
	6	100mA	SGMR-40D-4/B6/100-A+G	SGMR-40D-4/C6/100-A+G	
	10		SGMR-40D-4/B10/100-A+G	SGMR-40D-4/C10/100-A+G	
	13		SGMR-40D-4/B13/100-A+G	SGMR-40D-4/C13/100-A+G	
	15		SGMR-40D-4/B15/100-A+G	SGMR-40D-4/C15/100-A+G	
	16		SGMR-40D-4/B16/100-A+G	SGMR-40D-4/C16/100-A+G	
	20		SGMR-40D-4/B20/100-A+G	SGMR-40D-4/C20/100-A+G	
	25		SGMR-40D-4/B25/100-A+G	SGMR-40D-4/C25/100-A+G	
	32		SGMR-40D-4/B32/100-A+G	SGMR-40D-4/C32/100-A+G	
	40		SGMR-40D-4/B40/100-A+G	SGMR-40D-4/C40/100-A+G	
	6	300mA	SGMR-40D-4/B6/300-A+G	SGMR-40D-4/C6/300-A+G	
	10		SGMR-40D-4/B10/300-A+G	SGMR-40D-4/C10/300-A+G	
	13		SGMR-40D-4/B13/300-A+G	SGMR-40D-4/C13/300-A+G	
	15		SGMR-40D-4/B15/300-A+G	SGMR-40D-4/C15/300-A+G	
	16		SGMR-40D-4/B16/300-A+G	SGMR-40D-4/C16/300-A+G	
	20		SGMR-40D-4/B20/300-A+G	SGMR-40D-4/C20/300-A+G	
	25		SGMR-40D-4/B25/300-A+G	SGMR-40D-4/C25/300-A+G	
	32		SGMR-40D-4/B32/300-A+G	SGMR-40D-4/C32/300-A+G	
	40		SGMR-40D-4/B40/300-A+G	SGMR-40D-4/C40/300-A+G	

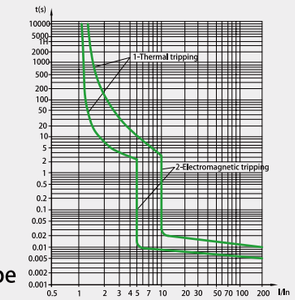
SGMR-40D Series Residual Current Circuit Breakers with Overcurrent Protection

Curves

B type



C type



Breaking time of residual current

Max.breaking time					
In(A)	IΔn(A)	IΔn	2 IΔn	5 IΔn	5-500A
6-40	0.03,0.1,0.3	0.1s	0.08s	0.04s	0.04s

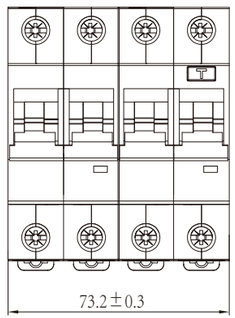
Wiring (The suitable conductors should be used for connection,see table below for relative parameters)

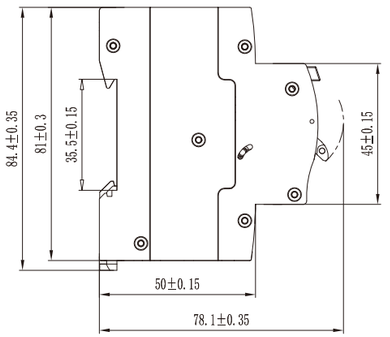
Rated current In (A)	Cross section area s(mm²)	Tightening torque(N.m)
6	1	2.0
10	1.5	
13	2.5	
16-20	4	
25	6	
32	10	
40		

Types

Type AC ⩙: For which tripping is ensured for residual sinusoidal alternating currents, whether suddenly applied or slowly rising.
Type A ⩙: For which tripping is ensued for residual sinusoidal alternating currents and residual pulsating direct currents, whether suddenly applied or slowly rising.
Type G G: RCD with short-term delay, with non-operation time of at least 10 ms.
·Increased resistance to peak currents to 3 kA (8/20 us).
·Upper limit of tripping time is the same as in RCDs for general use - with sensitivity of 30 mA fulfils the conditions of additional protection.
·Limitation of unwanted tripping of RCDs by short current surges (coordination with class II and III surge voltage protectors) etc.
·It is not specified in IEC standards, but resistance to undesirable tripping cannot be guaranteed without it.

Overall and mounting dimensions





SGBR-63M/H Series Residual Current Circuit Breakers with Overcurrent Protection

Standard		EN/IEC61009-1
Rated conditional short-circuit current(kA)		6,10
Rated current(A),In		6,10,13,16,20,25,32,40,50,63
Number of poles		1P+N
Rated sensitivity currents(mA),I∆n		10,30,100,300
Tripping curve		B,C
Rated residual non-operating current		0.5XI∆n
Rated impulse withstand voltage Uimp(kV)		4
Rated voltage(V)		AC 230/240
Ambient temperature (℃)		-25~+40,Max.95%humidity
Residual current off time		≤0.1s
Type of trip	Ground fault	Electronic
	Over current	Thermal-magnetic
Electrical endurance		4000
Mechanical endurance		10000
Terminal capacity		16mm² flexible/25mm² rigid
Protection degree		IP20
Installation		35mm DIN rail
Certification		CB TÜV CE

SGBR-63M

SGBR-63H

SGBR-63M Residual Current Circuit Breakers with Overcurrent Protection

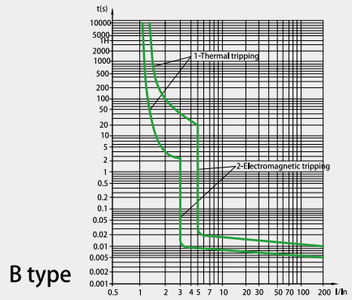
	Rated current(A)	I∆n	Type AC B curve	Type AC C curve	Type A B curve	Type A C curve	Packing unit
 Type AC	6	10mA	SGBR-63M-B6/10	SGBR-63M-C6/10	SGBR-63M-B6/10-A	SGBR-63M-C6/10-A	6
	10		SGBR-63M-B10/10	SGBR-63M-C10/10	SGBR-63M-B10/10-A	SGBR-63M-C10/10-A	
	13		SGBR-63M-B13/10	SGBR-63M-C13/10	SGBR-63M-B13/10-A	SGBR-63M-C13/10-A	
	16		SGBR-63M-B16/10	SGBR-63M-C16/10	SGBR-63M-B16/10-A	SGBR-63M-C16/10-A	
	20		SGBR-63M-B20/10	SGBR-63M-C20/10	SGBR-63M-B20/10-A	SGBR-63M-C20/10-A	
	25		SGBR-63M-B25/10	SGBR-63M-C25/10	SGBR-63M-B25/10-A	SGBR-63M-C25/10-A	
	32		SGBR-63M-B32/10	SGBR-63M-C32/10	SGBR-63M-B32/10-A	SGBR-63M-C32/10-A	
	40		SGBR-63M-B40/10	SGBR-63M-C40/10	SGBR-63M-B40/10-A	SGBR-63M-C40/10-A	
	50		SGBR-63M-B50/10	SGBR-63M-C50/10	SGBR-63M-B50/10-A	SGBR-63M-C50/10-A	
	63		SGBR-63M-B63/10	SGBR-63M-C63/10	SGBR-63M-B63/10-A	SGBR-63M-C63/10-A	
	6	30mA	SGBR-63M-B6/30	SGBR-63M-C6/30	SGBR-63M-B6/30-A	SGBR-63M-C6/30-A	
	10		SGBR-63M-B10/30	SGBR-63M-C10/30	SGBR-63M-B10/30-A	SGBR-63M-C10/30-A	
	13		SGBR-63M-B13/30	SGBR-63M-C13/30	SGBR-63M-B13/30-A	SGBR-63M-C13/30-A	
	16		SGBR-63M-B16/30	SGBR-63M-C16/30	SGBR-63M-B16/30-A	SGBR-63M-C16/30-A	
	20		SGBR-63M-B20/30	SGBR-63M-C20/30	SGBR-63M-B20/30-A	SGBR-63M-C20/30-A	
	25		SGBR-63M-B25/30	SGBR-63M-C25/30	SGBR-63M-B25/30-A	SGBR-63M-C25/30-A	
	32		SGBR-63M-B32/30	SGBR-63M-C32/30	SGBR-63M-B32/30-A	SGBR-63M-C32/30-A	
	40		SGBR-63M-B40/30	SGBR-63M-C40/30	SGBR-63M-B40/30-A	SGBR-63M-C40/30-A	
	50		SGBR-63M-B50/30	SGBR-63M-C50/30	SGBR-63M-B50/30-A	SGBR-63M-C50/30-A	
	63		SGBR-63M-B63/30	SGBR-63M-C63/30	SGBR-63M-B63/30-A	SGBR-63M-C63/30-A	
 Type A	6	100mA	SGBR-63M-B6/100	SGBR-63M-C6/100	SGBR-63M-B6/100-A	SGBR-63M-C6/100-A	
	10		SGBR-63M-B10/100	SGBR-63M-C10/100	SGBR-63M-B10/100-A	SGBR-63M-C10/100-A	
	13		SGBR-63M-B13/100	SGBR-63M-C13/100	SGBR-63M-B13/100-A	SGBR-63M-C13/100-A	
	16		SGBR-63M-B16/100	SGBR-63M-C16/100	SGBR-63M-B16/100-A	SGBR-63M-C16/100-A	
	20		SGBR-63M-B20/100	SGBR-63M-C20/100	SGBR-63M-B20/100-A	SGBR-63M-C20/100-A	
	25		SGBR-63M-B25/100	SGBR-63M-C25/100	SGBR-63M-B25/100-A	SGBR-63M-C25/100-A	
	32		SGBR-63M-B32/100	SGBR-63M-C32/100	SGBR-63M-B32/100-A	SGBR-63M-C32/100-A	
	40		SGBR-63M-B40/100	SGBR-63M-C40/100	SGBR-63M-B40/100-A	SGBR-63M-C40/100-A	
	50		SGBR-63M-B50/100	SGBR-63M-C50/100	SGBR-63M-B50/100-A	SGBR-63M-C50/100-A	
	63		SGBR-63M-B63/100	SGBR-63M-C63/100	SGBR-63M-B63/100-A	SGBR-63M-C63/100-A	
	6	300mA	SGBR-63M-B6/300	SGBR-63M-C6/300	SGBR-63M-B6/300-A	SGBR-63M-C6/300-A	
	10		SGBR-63M-B10/300	SGBR-63M-C10/300	SGBR-63M-B10/300-A	SGBR-63M-C10/300-A	
	13		SGBR-63M-B13/300	SGBR-63M-C13/300	SGBR-63M-B13/300-A	SGBR-63M-C13/300-A	
	16		SGBR-63M-B16/300	SGBR-63M-C16/300	SGBR-63M-B16/300-A	SGBR-63M-C16/300-A	
	20		SGBR-63M-B20/300	SGBR-63M-C20/300	SGBR-63M-B20/300-A	SGBR-63M-C20/300-A	
	25		SGBR-63M-B25/300	SGBR-63M-C25/300	SGBR-63M-B25/300-A	SGBR-63M-C25/300-A	
	32		SGBR-63M-B32/300	SGBR-63M-C32/300	SGBR-63M-B32/300-A	SGBR-63M-C32/300-A	
	40		SGBR-63M-B40/300	SGBR-63M-C40/300	SGBR-63M-B40/300-A	SGBR-63M-C40/300-A	
	50		SGBR-63M-B50/300	SGBR-63M-C50/300	SGBR-63M-B50/300-A	SGBR-63M-C50/300-A	
	63		SGBR-63M-B63/300	SGBR-63M-C63/300	SGBR-63M-B63/300-A	SGBR-63M-C63/300-A	

SGBR-63H Residual Current Circuit Breakers with Overcurrent Protection

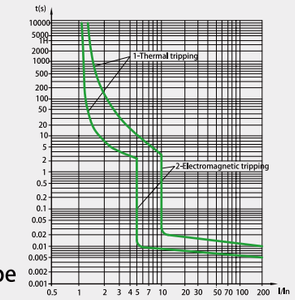
	Rated current(A)	IΔn	Type AC B curve	Type AC C curve	Type A B curve	Type A C curve	Packing unit
 Type AC	6	10mA	SGBR-63H-B6/10	SGBR-63H-C6/10	SGBR-63H-B6/10-A	SGBR-63H-C6/10-A	6
	10		SGBR-63H-B10/10	SGBR-63H-C10/10	SGBR-63H-B10/10-A	SGBR-63H-C10/10-A	
	13		SGBR-63H-B13/10	SGBR-63H-C13/10	SGBR-63H-B13/10-A	SGBR-63H-C13/10-A	
	16		SGBR-63H-B16/10	SGBR-63H-C16/10	SGBR-63H-B16/10-A	SGBR-63H-C16/10-A	
	20		SGBR-63H-B20/10	SGBR-63H-C20/10	SGBR-63H-B20/10-A	SGBR-63H-C20/10-A	
	25		SGBR-63H-B25/10	SGBR-63H-C25/10	SGBR-63H-B25/10-A	SGBR-63H-C25/10-A	
	32		SGBR-63H-B32/10	SGBR-63H-C32/10	SGBR-63H-B32/10-A	SGBR-63H-C32/10-A	
	40		SGBR-63H-B40/10	SGBR-63H-C40/10	SGBR-63H-B40/10-A	SGBR-63H-C40/10-A	
	50		SGBR-63H-B50/10	SGBR-63H-C50/10	SGBR-63H-B50/10-A	SGBR-63H-C50/10-A	
	63		SGBR-63H-B63/10	SGBR-63H-C63/10	SGBR-63H-B63/10-A	SGBR-63H-C63/10-A	
	6	30mA	SGBR-63H-B6/30	SGBR-63H-C6/30	SGBR-63H-B6/30-A	SGBR-63H-C6/30-A	
	10		SGBR-63H-B10/30	SGBR-63H-C10/30	SGBR-63H-B10/30-A	SGBR-63H-C10/30-A	
	13		SGBR-63H-B13/30	SGBR-63H-C13/30	SGBR-63H-B13/30-A	SGBR-63H-C13/30-A	
	16		SGBR-63H-B16/30	SGBR-63H-C16/30	SGBR-63H-B16/30-A	SGBR-63H-C16/30-A	
	20		SGBR-63H-B20/30	SGBR-63H-C20/30	SGBR-63H-B20/30-A	SGBR-63H-C20/30-A	
	25		SGBR-63H-B25/30	SGBR-63H-C25/30	SGBR-63H-B25/30-A	SGBR-63H-C25/30-A	
	32		SGBR-63H-B32/30	SGBR-63H-C32/30	SGBR-63H-B32/30-A	SGBR-63H-C32/30-A	
	40		SGBR-63H-B40/30	SGBR-63H-C40/30	SGBR-63H-B40/30-A	SGBR-63H-C40/30-A	
	50		SGBR-63H-B50/30	SGBR-63H-C50/30	SGBR-63H-B50/30-A	SGBR-63H-C50/30-A	
	63		SGBR-63H-B63/30	SGBR-63H-C63/30	SGBR-63H-B63/30-A	SGBR-63H-C63/30-A	
 Type A	6	100mA	SGBR-63H-B6/100	SGBR-63H-C6/100	SGBR-63H-B6/100-A	SGBR-63H-C6/100-A	
	10		SGBR-63H-B10/100	SGBR-63H-C10/100	SGBR-63H-B10/100-A	SGBR-63H-C10/100-A	
	13		SGBR-63H-B13/100	SGBR-63H-C13/100	SGBR-63H-B13/100-A	SGBR-63H-C13/100-A	
	16		SGBR-63H-B16/100	SGBR-63H-C16/100	SGBR-63H-B16/100-A	SGBR-63H-C16/100-A	
	20		SGBR-63H-B20/100	SGBR-63H-C20/100	SGBR-63H-B20/100-A	SGBR-63H-C20/100-A	
	25		SGBR-63H-B25/100	SGBR-63H-C25/100	SGBR-63H-B25/100-A	SGBR-63H-C25/100-A	
	32		SGBR-63H-B32/100	SGBR-63H-C32/100	SGBR-63H-B32/100-A	SGBR-63H-C32/100-A	
	40		SGBR-63H-B40/100	SGBR-63H-C40/100	SGBR-63H-B40/100-A	SGBR-63H-C40/100-A	
	50		SGBR-63H-B50/100	SGBR-63H-C50/100	SGBR-63H-B50/100-A	SGBR-63H-C50/100-A	
	63		SGBR-63H-B63/100	SGBR-63H-C63/100	SGBR-63H-B63/100-A	SGBR-63H-C63/100-A	
	6	300mA	SGBR-63H-B6/300	SGBR-63H-C6/300	SGBR-63H-B6/300-A	SGBR-63H-C6/300-A	
	10		SGBR-63H-B10/300	SGBR-63H-C10/300	SGBR-63H-B10/300-A	SGBR-63H-C10/300-A	
	13		SGBR-63H-B13/300	SGBR-63H-C13/300	SGBR-63H-B13/300-A	SGBR-63H-C13/300-A	
	16		SGBR-63H-B16/300	SGBR-63H-C16/300	SGBR-63H-B16/300-A	SGBR-63H-C16/300-A	
	20		SGBR-63H-B20/300	SGBR-63H-C20/300	SGBR-63H-B20/300-A	SGBR-63H-C20/300-A	
	25		SGBR-63H-B25/300	SGBR-63H-C25/300	SGBR-63H-B25/300-A	SGBR-63H-C25/300-A	
	32		SGBR-63H-B32/300	SGBR-63H-C32/300	SGBR-63H-B32/300-A	SGBR-63H-C32/300-A	
	40		SGBR-63H-B40/300	SGBR-63H-C40/300	SGBR-63H-B40/300-A	SGBR-63H-C40/300-A	
	50		SGBR-63H-B50/300	SGBR-63H-C50/300	SGBR-63H-B50/300-A	SGBR-63H-C50/300-A	
	63		SGBR-63H-B63/300	SGBR-63H-C63/300	SGBR-63H-B63/300-A	SGBR-63H-C63/300-A	

SGBR-63M/H Series Residual Current Circuit Breakers with Overcurrent Protection

Curves



B type



C type

Breaking time of residual current

Max.breaking time					
In(A)	IΔn(A)	IΔn	2 IΔn	5 IΔn	5-500A
6-63	0.01,0.03,0.1,0.3	0.1s	0.08s	0.04s	0.04s

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

Rated current In (A)	Cross section area s(mm²)	Tightening torque(N.m)
6	1	2.0
10	1.5	
13	1.5	
16-20	2.5	
25	4	
32	6	
40-50	10	
63	16	

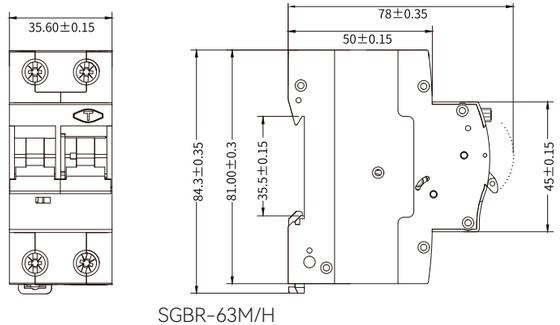
Types

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

Tripping sensitivity data

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

Overall and mounting dimensions



SGBR-63M/H

SGRM-63LE Series Residual Current Circuit Breakers with Overcurrent Protection

Standard		EN/IEC 61009-1
Rated conditional short-circuit current(kA)		6
Rated current(A),In		6,10,16,20,25,32,40,50,63
Number of poles		1P+N,2P,3P,3P+N,4P
Rated sensitivity currents(mA),I∆n		10,30,100,300
Tripping curve		B,C,D
Rated residual non-operating current		0.5XI∆n
Rated impulse withstand voltage Uimp(kV)		4
Rated voltage(V)		1P+N, 2P: AC 230/240 3P, 3P+N, 4P:AC 400/415
Ambient temperature (°C)		-25~+40,Max.95%humidity
Residual current off time		≤0.1s
Type of trip	Ground fault	Electronic
	Over current	Thermal-magnetic
Electrical endurance		4000
Mechanical endurance		10000
Terminal capacity		16mm² flexible/25mm² rigid
Protection degree		IP20
Installation		35mm DIN rail
Certification		TÜV CE CB

SGRM-63LE-1P+N

SGRM-63LE-2P

SGRM-63LE-3P

SGRM-63LE-4P

SGRM-63LE Series Residual Current Circuit Breakers with Overcurrent Protection

	Rated current(A)	I∆n	Type AC B curve	Type AC C curve	Type AC D curve	Packing unit
 Type AC	6	10mA	SGRM-63LE-1-B6N/10	SGRM-63LE-1-C6N/10	SGRM-63LE-1-D6N/10	1
	10		SGRM-63LE-1-B10N/10	SGRM-63LE-1-C10N/10	SGRM-63LE-1-D10N/10	
	16		SGRM-63LE-1-B16N/10	SGRM-63LE-1-C16N/10	SGRM-63LE-1-D16N/10	
	20		SGRM-63LE-1-B20N/10	SGRM-63LE-1-C20N/10	SGRM-63LE-1-D20N/10	
	25		SGRM-63LE-1-B25N/10	SGRM-63LE-1-C25N/10	SGRM-63LE-1-D25N/10	
	32		SGRM-63LE-1-B32N/10	SGRM-63LE-1-C32N/10	SGRM-63LE-1-D32N/10	
	40		SGRM-63LE-1-B40N/10	SGRM-63LE-1-C40N/10	SGRM-63LE-1-D40N/10	
	50		SGRM-63LE-1-B50N/10	SGRM-63LE-1-C50N/10	SGRM-63LE-1-D50N/10	
	63		SGRM-63LE-1-B63N/10	SGRM-63LE-1-C63N/10	SGRM-63LE-1-D63N/10	
	6	30mA	SGRM-63LE-1-B6N/30	SGRM-63LE-1-C6N/30	SGRM-63LE-1-D6N/30	
	10		SGRM-63LE-1-B10N/30	SGRM-63LE-1-C10N/30	SGRM-63LE-1-D10N/30	
	16		SGRM-63LE-1-B16N/30	SGRM-63LE-1-C16N/30	SGRM-63LE-1-D16N/30	
	20		SGRM-63LE-1-B20N/30	SGRM-63LE-1-C20N/30	SGRM-63LE-1-D20N/30	
	25		SGRM-63LE-1-B25N/30	SGRM-63LE-1-C25N/30	SGRM-63LE-1-D25N/30	
	32		SGRM-63LE-1-B32N/30	SGRM-63LE-1-C32N/30	SGRM-63LE-1-D32N/30	
	40		SGRM-63LE-1-B40N/30	SGRM-63LE-1-C40N/30	SGRM-63LE-1-D40N/30	
	50		SGRM-63LE-1-B50N/30	SGRM-63LE-1-C50N/30	SGRM-63LE-1-D50N/30	
	63		SGRM-63LE-1-B63N/30	SGRM-63LE-1-C63N/30	SGRM-63LE-1-D63N/30	
	6	100mA	SGRM-63LE-1-B6N/100	SGRM-63LE-1-C6N/100	SGRM-63LE-1-D6N/100	
	10		SGRM-63LE-1-B10N/100	SGRM-63LE-1-C10N/100	SGRM-63LE-1-D10N/100	
	16		SGRM-63LE-1-B16N/100	SGRM-63LE-1-C16N/100	SGRM-63LE-1-D16N/100	
	20		SGRM-63LE-1-B20N/100	SGRM-63LE-1-C20N/100	SGRM-63LE-1-D20N/100	
	25		SGRM-63LE-1-B25N/100	SGRM-63LE-1-C25N/100	SGRM-63LE-1-D25N/100	
	32		SGRM-63LE-1-B32N/100	SGRM-63LE-1-C32N/100	SGRM-63LE-1-D32N/100	
	40		SGRM-63LE-1-B40N/100	SGRM-63LE-1-C40N/100	SGRM-63LE-1-D40N/100	
	50		SGRM-63LE-1-B50N/100	SGRM-63LE-1-C50N/100	SGRM-63LE-1-D50N/100	
	63		SGRM-63LE-1-B63N/100	SGRM-63LE-1-C63N/100	SGRM-63LE-1-D63N/100	
	6	300mA	SGRM-63LE-1-B6N/300	SGRM-63LE-1-C6N/300	SGRM-63LE-1-D6N/300	
	10		SGRM-63LE-1-B10N/300	SGRM-63LE-1-C10N/300	SGRM-63LE-1-D10N/300	
	16		SGRM-63LE-1-B16N/300	SGRM-63LE-1-C16N/300	SGRM-63LE-1-D16N/300	
	20		SGRM-63LE-1-B20N/300	SGRM-63LE-1-C20N/300	SGRM-63LE-1-D20N/300	
	25		SGRM-63LE-1-B25N/300	SGRM-63LE-1-C25N/300	SGRM-63LE-1-D25N/300	
	32		SGRM-63LE-1-B32N/300	SGRM-63LE-1-C32N/300	SGRM-63LE-1-D32N/300	
	40		SGRM-63LE-1-B40N/300	SGRM-63LE-1-C40N/300	SGRM-63LE-1-D40N/300	
	50		SGRM-63LE-1-B50N/300	SGRM-63LE-1-C50N/300	SGRM-63LE-1-D50N/300	
	63		SGRM-63LE-1-B63N/300	SGRM-63LE-1-C63N/300	SGRM-63LE-1-D63N/300	

SGRM-63LE Series Residual Current Circuit Breakers with Overcurrent Protection

	Rated current(A)	IΔn	Type AC			Packing unit
			B curve	C curve	D curve	
 Type AC	6	10mA	SGRM-63LE-2-B6/10	SGRM-63LE-2-C6/10	SGRM-63LE-2-D6/10	1
	10		SGRM-63LE-2-B10/10	SGRM-63LE-2-C10/10	SGRM-63LE-2-D10/10	
	16		SGRM-63LE-2-B16/10	SGRM-63LE-2-C16/10	SGRM-63LE-2-D16/10	
	20		SGRM-63LE-2-B20/10	SGRM-63LE-2-C20/10	SGRM-63LE-2-D20/10	
	25		SGRM-63LE-2-B25/10	SGRM-63LE-2-C25/10	SGRM-63LE-2-D25/10	
	32		SGRM-63LE-2-B32/10	SGRM-63LE-2-C32/10	SGRM-63LE-2-D32/10	
	40		SGRM-63LE-2-B40/10	SGRM-63LE-2-C40/10	SGRM-63LE-2-D40/10	
	50		SGRM-63LE-2-B50/10	SGRM-63LE-2-C50/10	SGRM-63LE-2-D50/10	
	63		SGRM-63LE-2-B63/10	SGRM-63LE-2-C63/10	SGRM-63LE-2-D63/10	
	6	30mA	SGRM-63LE-2-B6/30	SGRM-63LE-2-C6/30	SGRM-63LE-2-D6/30	
	10		SGRM-63LE-2-B10/30	SGRM-63LE-2-C10/30	SGRM-63LE-2-D10/30	
	16		SGRM-63LE-2-B16/30	SGRM-63LE-2-C16/30	SGRM-63LE-2-D16/30	
	20		SGRM-63LE-2-B20/30	SGRM-63LE-2-C20/30	SGRM-63LE-2-D20/30	
	25		SGRM-63LE-2-B25/30	SGRM-63LE-2-C25/30	SGRM-63LE-2-D25/30	
	32		SGRM-63LE-2-B32/30	SGRM-63LE-2-C32/30	SGRM-63LE-2-D32/30	
	40		SGRM-63LE-2-B40/30	SGRM-63LE-2-C40/30	SGRM-63LE-2-D40/30	
	50		SGRM-63LE-2-B50/30	SGRM-63LE-2-C50/30	SGRM-63LE-2-D50/30	
	63		SGRM-63LE-2-B63/30	SGRM-63LE-2-C63/30	SGRM-63LE-2-D63/30	
	6	100mA	SGRM-63LE-2-B6/100	SGRM-63LE-2-C6/100	SGRM-63LE-2-D6/100	
	10		SGRM-63LE-2-B10/100	SGRM-63LE-2-C10/100	SGRM-63LE-2-D10/100	
	16		SGRM-63LE-2-B16/100	SGRM-63LE-2-C16/100	SGRM-63LE-2-D16/100	
	20		SGRM-63LE-2-B20/100	SGRM-63LE-2-C20/100	SGRM-63LE-2-D20/100	
	25		SGRM-63LE-2-B25/100	SGRM-63LE-2-C25/100	SGRM-63LE-2-D25/100	
	32		SGRM-63LE-2-B32/100	SGRM-63LE-2-C32/100	SGRM-63LE-2-D32/100	
	40		SGRM-63LE-2-B40/100	SGRM-63LE-2-C40/100	SGRM-63LE-2-D40/100	
	50		SGRM-63LE-2-B50/100	SGRM-63LE-2-C50/100	SGRM-63LE-2-D50/100	
	63		SGRM-63LE-2-B63/100	SGRM-63LE-2-C63/100	SGRM-63LE-2-D63/100	
	6	300mA	SGRM-63LE-2-B6/300	SGRM-63LE-2-C6/300	SGRM-63LE-2-D6/300	
	10		SGRM-63LE-2-B10/300	SGRM-63LE-2-C10/300	SGRM-63LE-2-D10/300	
	16		SGRM-63LE-2-B16/300	SGRM-63LE-2-C16/300	SGRM-63LE-2-D16/300	
	20		SGRM-63LE-2-B20/300	SGRM-63LE-2-C20/300	SGRM-63LE-2-D20/300	
	25		SGRM-63LE-2-B25/300	SGRM-63LE-2-C25/300	SGRM-63LE-2-D25/300	
	32		SGRM-63LE-2-B32/300	SGRM-63LE-2-C32/300	SGRM-63LE-2-D32/300	
	40		SGRM-63LE-2-B40/300	SGRM-63LE-2-C40/300	SGRM-63LE-2-D40/300	
	50		SGRM-63LE-2-B50/300	SGRM-63LE-2-C50/300	SGRM-63LE-2-D50/300	
	63		SGRM-63LE-2-B63/300	SGRM-63LE-2-C63/300	SGRM-63LE-2-D63/300	

SGRM-63LE Series Residual Current Circuit Breakers with Overcurrent Protection

	Rated current(A)	IΔn	Type AC			Packing unit
			B curve	C curve	D curve	
 Type AC	6	10mA	SGRM-63LE-3-B6/10	SGRM-63LE-3-C6/10	SGRM-63LE-3-D6/10	1
	10		SGRM-63LE-3-B10/10	SGRM-63LE-3-C10/10	SGRM-63LE-3-D10/10	
	16		SGRM-63LE-3-B16/10	SGRM-63LE-3-C16/10	SGRM-63LE-3-D16/10	
	20		SGRM-63LE-3-B20/10	SGRM-63LE-3-C20/10	SGRM-63LE-3-D20/10	
	25		SGRM-63LE-3-B25/10	SGRM-63LE-3-C25/10	SGRM-63LE-3-D25/10	
	32		SGRM-63LE-3-B32/10	SGRM-63LE-3-C32/10	SGRM-63LE-3-D32/10	
	40		SGRM-63LE-3-B40/10	SGRM-63LE-3-C40/10	SGRM-63LE-3-D40/10	
	50		SGRM-63LE-3-B50/10	SGRM-63LE-3-C50/10	SGRM-63LE-3-D50/10	
	63		SGRM-63LE-3-B63/10	SGRM-63LE-3-C63/10	SGRM-63LE-3-D63/10	
	6	30mA	SGRM-63LE-3-B6/30	SGRM-63LE-3-C6/30	SGRM-63LE-3-D6/30	
	10		SGRM-63LE-3-B10/30	SGRM-63LE-3-C10/30	SGRM-63LE-3-D10/30	
	16		SGRM-63LE-3-B16/30	SGRM-63LE-3-C16/30	SGRM-63LE-3-D16/30	
	20		SGRM-63LE-3-B20/30	SGRM-63LE-3-C20/30	SGRM-63LE-3-D20/30	
	25		SGRM-63LE-3-B25/30	SGRM-63LE-3-C25/30	SGRM-63LE-3-D25/30	
	32		SGRM-63LE-3-B32/30	SGRM-63LE-3-C32/30	SGRM-63LE-3-D32/30	
	40		SGRM-63LE-3-B40/30	SGRM-63LE-3-C40/30	SGRM-63LE-3-D40/30	
	50		SGRM-63LE-3-B50/30	SGRM-63LE-3-C50/30	SGRM-63LE-3-D50/30	
	63		SGRM-63LE-3-B63/30	SGRM-63LE-3-C63/30	SGRM-63LE-3-D63/30	
	6	100mA	SGRM-63LE-3-B6/100	SGRM-63LE-3-C6/100	SGRM-63LE-3-D6/100	
	10		SGRM-63LE-3-B10/100	SGRM-63LE-3-C10/100	SGRM-63LE-3-D10/100	
	16		SGRM-63LE-3-B16/100	SGRM-63LE-3-C16/100	SGRM-63LE-3-D16/100	
	20		SGRM-63LE-3-B20/100	SGRM-63LE-3-C20/100	SGRM-63LE-3-D20/100	
	25		SGRM-63LE-3-B25/100	SGRM-63LE-3-C25/100	SGRM-63LE-3-D25/100	
	32		SGRM-63LE-3-B32/100	SGRM-63LE-3-C32/100	SGRM-63LE-3-D32/100	
	40		SGRM-63LE-3-B40/100	SGRM-63LE-3-C40/100	SGRM-63LE-3-D40/100	
	50		SGRM-63LE-3-B50/100	SGRM-63LE-3-C50/100	SGRM-63LE-3-D50/100	
	63		SGRM-63LE-3-B63/100	SGRM-63LE-3-C63/100	SGRM-63LE-3-D63/100	
	6	300mA	SGRM-63LE-3-B6/300	SGRM-63LE-3-C6/300	SGRM-63LE-3-D6/300	
	10		SGRM-63LE-3-B10/300	SGRM-63LE-3-C10/300	SGRM-63LE-3-D10/300	
	16		SGRM-63LE-3-B16/300	SGRM-63LE-3-C16/300	SGRM-63LE-3-D16/300	
	20		SGRM-63LE-3-B20/300	SGRM-63LE-3-C20/300	SGRM-63LE-3-D20/300	
	25		SGRM-63LE-3-B25/300	SGRM-63LE-3-C25/300	SGRM-63LE-3-D25/300	
	32		SGRM-63LE-3-B32/300	SGRM-63LE-3-C32/300	SGRM-63LE-3-D32/300	
	40		SGRM-63LE-3-B40/300	SGRM-63LE-3-C40/300	SGRM-63LE-3-D40/300	
	50		SGRM-63LE-3-B50/300	SGRM-63LE-3-C50/300	SGRM-63LE-3-D50/300	
	63		SGRM-63LE-3-B63/300	SGRM-63LE-3-C63/300	SGRM-63LE-3-D63/300	

SGRM-63LE Series Residual Current Circuit Breakers with Overcurrent Protection

	Rated current(A)	IΔn	Type AC			Packing unit
			B curve	C curve	D curve	
	6	10mA	SGRM-63LE-3-B6N/10	SGRM-63LE-3-C6N/10	SGRM-63LE-3-D6N/10	
	10		SGRM-63LE-3-B10N/10	SGRM-63LE-3-C10N/10	SGRM-63LE-3-D10N/10	
	16		SGRM-63LE-3-B16N/10	SGRM-63LE-3-C16N/10	SGRM-63LE-3-D16N/10	
	20		SGRM-63LE-3-B20N/10	SGRM-63LE-3-C20N/10	SGRM-63LE-3-D20N/10	
	25		SGRM-63LE-3-B25N/10	SGRM-63LE-3-C25N/10	SGRM-63LE-3-D25N/10	
	32		SGRM-63LE-3-B32N/10	SGRM-63LE-3-C32N/10	SGRM-63LE-3-D32N/10	
	40		SGRM-63LE-3-B40N/10	SGRM-63LE-3-C40N/10	SGRM-63LE-3-D40N/10	
	50		SGRM-63LE-3-B50N/10	SGRM-63LE-3-C50N/10	SGRM-63LE-3-D50N/10	
	63		SGRM-63LE-3-B63N/10	SGRM-63LE-3-C63N/10	SGRM-63LE-3-D63N/10	
	6	30mA	SGRM-63LE-3-B6N/30	SGRM-63LE-3-C6N/30	SGRM-63LE-3-D6N/30	
	10		SGRM-63LE-3-B10N/30	SGRM-63LE-3-C10N/30	SGRM-63LE-3-D10N/30	
	16		SGRM-63LE-3-B16N/30	SGRM-63LE-3-C16N/30	SGRM-63LE-3-D16N/30	
	20		SGRM-63LE-3-B20N/30	SGRM-63LE-3-C20N/30	SGRM-63LE-3-D20N/30	
	25		SGRM-63LE-3-B25N/30	SGRM-63LE-3-C25N/30	SGRM-63LE-3-D25N/30	
	32		SGRM-63LE-3-B32N/30	SGRM-63LE-3-C32N/30	SGRM-63LE-3-D32N/30	
	40		SGRM-63LE-3-B40N/30	SGRM-63LE-3-C40N/30	SGRM-63LE-3-D40N/30	
	50		SGRM-63LE-3-B50N/30	SGRM-63LE-3-C50N/30	SGRM-63LE-3-D50N/30	
	63		SGRM-63LE-3-B63N/30	SGRM-63LE-3-C63N/30	SGRM-63LE-3-D63N/30	
	6	100mA	SGRM-63LE-3-B6N/100	SGRM-63LE-3-C6N/100	SGRM-63LE-3-D6N/100	1
	10		SGRM-63LE-3-B10N/100	SGRM-63LE-3-C10N/100	SGRM-63LE-3-D10N/100	
	16		SGRM-63LE-3-B16N/100	SGRM-63LE-3-C16N/100	SGRM-63LE-3-D16N/100	
	20		SGRM-63LE-3-B20N/100	SGRM-63LE-3-C20N/100	SGRM-63LE-3-D20N/100	
	25		SGRM-63LE-3-B25N/100	SGRM-63LE-3-C25N/100	SGRM-63LE-3-D25N/100	
	32		SGRM-63LE-3-B32N/100	SGRM-63LE-3-C32N/100	SGRM-63LE-3-D32N/100	
	40		SGRM-63LE-3-B40N/100	SGRM-63LE-3-C40N/100	SGRM-63LE-3-D40N/100	
	50		SGRM-63LE-3-B50N/100	SGRM-63LE-3-C50N/100	SGRM-63LE-3-D50N/100	
	63		SGRM-63LE-3-B63N/100	SGRM-63LE-3-C63N/100	SGRM-63LE-3-D63N/100	
	6	300mA	SGRM-63LE-3-B6N/300	SGRM-63LE-3-C6N/300	SGRM-63LE-3-D6N/300	
	10		SGRM-63LE-3-B10N/300	SGRM-63LE-3-C10N/300	SGRM-63LE-3-D10N/300	
	16		SGRM-63LE-3-B16N/300	SGRM-63LE-3-C16N/300	SGRM-63LE-3-D16N/300	
	20		SGRM-63LE-3-B20N/300	SGRM-63LE-3-C20N/300	SGRM-63LE-3-D20N/300	
	25		SGRM-63LE-3-B25N/300	SGRM-63LE-3-C25N/300	SGRM-63LE-3-D25N/300	
	32		SGRM-63LE-3-B32N/300	SGRM-63LE-3-C32N/300	SGRM-63LE-3-D32N/300	
	40		SGRM-63LE-3-B40N/300	SGRM-63LE-3-C40N/300	SGRM-63LE-3-D40N/300	
	50		SGRM-63LE-3-B50N/300	SGRM-63LE-3-C50N/300	SGRM-63LE-3-D50N/300	
	63		SGRM-63LE-3-B63N/300	SGRM-63LE-3-C63N/300	SGRM-63LE-3-D63N/300	

Type AC

SGRM-63LE Series Residual Current Circuit Breakers with Overcurrent Protection

	Rated current(A)	IΔn	Type AC			Packing unit
			B curve	C curve	D curve	
	6	10mA	SGRM-63LE-4-B6/10	SGRM-63LE-4-C6/10	SGRM-63LE-4-D6/10	
	10		SGRM-63LE-4-B10/10	SGRM-63LE-4-C10/10	SGRM-63LE-4-D10/10	
	16		SGRM-63LE-4-B16/10	SGRM-63LE-4-C16/10	SGRM-63LE-4-D16/10	
	20		SGRM-63LE-4-B20/10	SGRM-63LE-4-C20/10	SGRM-63LE-4-D20/10	
	25		SGRM-63LE-4-B25/10	SGRM-63LE-4-C25/10	SGRM-63LE-4-D25/10	
	32		SGRM-63LE-4-B32/10	SGRM-63LE-4-C32/10	SGRM-63LE-4-D32/10	
	40		SGRM-63LE-4-B40/10	SGRM-63LE-4-C40/10	SGRM-63LE-4-D40/10	
	50		SGRM-63LE-4-B50/10	SGRM-63LE-4-C50/10	SGRM-63LE-4-D50/10	
	63		SGRM-63LE-4-B63/10	SGRM-63LE-4-C63/10	SGRM-63LE-4-D63/10	
	6	30mA	SGRM-63LE-4-B6/30	SGRM-63LE-4-C6/30	SGRM-63LE-4-D6/30	
	10		SGRM-63LE-4-B10/30	SGRM-63LE-4-C10/30	SGRM-63LE-4-D10/30	
	16		SGRM-63LE-4-B16/30	SGRM-63LE-4-C16/30	SGRM-63LE-4-D16/30	
	20		SGRM-63LE-4-B20/30	SGRM-63LE-4-C20/30	SGRM-63LE-4-D20/30	
	25		SGRM-63LE-4-B25/30	SGRM-63LE-4-C25/30	SGRM-63LE-4-D25/30	
	32		SGRM-63LE-4-B32/30	SGRM-63LE-4-C32/30	SGRM-63LE-4-D32/30	
	40		SGRM-63LE-4-B40/30	SGRM-63LE-4-C40/30	SGRM-63LE-4-D40/30	
	50		SGRM-63LE-4-B50/30	SGRM-63LE-4-C50/30	SGRM-63LE-4-D50/30	
	63		SGRM-63LE-4-B63/30	SGRM-63LE-4-C63/30	SGRM-63LE-4-D63/30	
	6	100mA	SGRM-63LE-4-B6/100	SGRM-63LE-4-C6/100	SGRM-63LE-4-D6/100	1
	10		SGRM-63LE-4-B10/100	SGRM-63LE-4-C10/100	SGRM-63LE-4-D10/100	
	16		SGRM-63LE-4-B16/100	SGRM-63LE-4-C16/100	SGRM-63LE-4-D16/100	
	20		SGRM-63LE-4-B20/100	SGRM-63LE-4-C20/100	SGRM-63LE-4-D20/100	
	25		SGRM-63LE-4-B25/100	SGRM-63LE-4-C25/100	SGRM-63LE-4-D25/100	
	32		SGRM-63LE-4-B32/100	SGRM-63LE-4-C32/100	SGRM-63LE-4-D32/100	
	40		SGRM-63LE-4-B40/100	SGRM-63LE-4-C40/100	SGRM-63LE-4-D40/100	
	50		SGRM-63LE-4-B50/100	SGRM-63LE-4-C50/100	SGRM-63LE-4-D50/100	
	63		SGRM-63LE-4-B63/100	SGRM-63LE-4-C63/100	SGRM-63LE-4-D63/100	
	6	300mA	SGRM-63LE-4-B6/300	SGRM-63LE-4-C6/300	SGRM-63LE-4-D6/300	
	10		SGRM-63LE-4-B10/300	SGRM-63LE-4-C10/300	SGRM-63LE-4-D10/300	
	16		SGRM-63LE-4-B16/300	SGRM-63LE-4-C16/300	SGRM-63LE-4-D16/300	
	20		SGRM-63LE-4-B20/300	SGRM-63LE-4-C20/300	SGRM-63LE-4-D20/300	
	25		SGRM-63LE-4-B25/300	SGRM-63LE-4-C25/300	SGRM-63LE-4-D25/300	
	32		SGRM-63LE-4-B32/300	SGRM-63LE-4-C32/300	SGRM-63LE-4-D32/300	
	40		SGRM-63LE-4-B40/300	SGRM-63LE-4-C40/300	SGRM-63LE-4-D40/300	
	50		SGRM-63LE-4-B50/300	SGRM-63LE-4-C50/300	SGRM-63LE-4-D50/300	
	63		SGRM-63LE-4-B63/300	SGRM-63LE-4-C63/300	SGRM-63LE-4-D63/300	

Type AC

SGRM-63LE Series Residual Current Circuit Breakers with Overcurrent Protection

	Rated current(A)	IΔn	Type A			Packing unit
			B curve	C curve	D curve	
 Type A	6	10mA	SGRM-63LE-1-B6N/10-A	SGRM-63LE-1-C6N/10-A	SGRM-63LE-1-D6N/10-A	1
	10		SGRM-63LE-1-B10N/10-A	SGRM-63LE-1-C10N/10-A	SGRM-63LE-1-D10N/10-A	
	16		SGRM-63LE-1-B16N/10-A	SGRM-63LE-1-C16N/10-A	SGRM-63LE-1-D16N/10-A	
	20		SGRM-63LE-1-B20N/10-A	SGRM-63LE-1-C20N/10-A	SGRM-63LE-1-D20N/10-A	
	25		SGRM-63LE-1-B25N/10-A	SGRM-63LE-1-C25N/10-A	SGRM-63LE-1-D25N/10-A	
	32		SGRM-63LE-1-B32N/10-A	SGRM-63LE-1-C32N/10-A	SGRM-63LE-1-D32N/10-A	
	40		SGRM-63LE-1-B40N/10-A	SGRM-63LE-1-C40N/10-A	SGRM-63LE-1-D40N/10-A	
	50		SGRM-63LE-1-B50N/10-A	SGRM-63LE-1-C50N/10-A	SGRM-63LE-1-D50N/10-A	
	63		SGRM-63LE-1-B63N/10-A	SGRM-63LE-1-C63N/10-A	SGRM-63LE-1-D63N/10-A	
	6	30mA	SGRM-63LE-1-B6N/30-A	SGRM-63LE-1-C6N/30-A	SGRM-63LE-1-D6N/30-A	
	10		SGRM-63LE-1-B10N/30-A	SGRM-63LE-1-C10N/30-A	SGRM-63LE-1-D10N/30-A	
	16		SGRM-63LE-1-B16N/30-A	SGRM-63LE-1-C16N/30-A	SGRM-63LE-1-D16N/30-A	
	20		SGRM-63LE-1-B20N/30-A	SGRM-63LE-1-C20N/30-A	SGRM-63LE-1-D20N/30-A	
	25		SGRM-63LE-1-B25N/30-A	SGRM-63LE-1-C25N/30-A	SGRM-63LE-1-D25N/30-A	
	32		SGRM-63LE-1-B32N/30-A	SGRM-63LE-1-C32N/30-A	SGRM-63LE-1-D32N/30-A	
	40		SGRM-63LE-1-B40N/30-A	SGRM-63LE-1-C40N/30-A	SGRM-63LE-1-D40N/30-A	
	50		SGRM-63LE-1-B50N/30-A	SGRM-63LE-1-C50N/30-A	SGRM-63LE-1-D50N/30-A	
	63		SGRM-63LE-1-B63N/30-A	SGRM-63LE-1-C63N/30-A	SGRM-63LE-1-D63N/30-A	
	6	100mA	SGRM-63LE-1-B6N/100-A	SGRM-63LE-1-C6N/100-A	SGRM-63LE-1-D6N/100-A	
	10		SGRM-63LE-1-B10N/100-A	SGRM-63LE-1-C10N/100-A	SGRM-63LE-1-D10N/100-A	
	16		SGRM-63LE-1-B16N/100-A	SGRM-63LE-1-C16N/100-A	SGRM-63LE-1-D16N/100-A	
	20		SGRM-63LE-1-B20N/100-A	SGRM-63LE-1-C20N/100-A	SGRM-63LE-1-D20N/100-A	
	25		SGRM-63LE-1-B25N/100-A	SGRM-63LE-1-C25N/100-A	SGRM-63LE-1-D25N/100-A	
	32		SGRM-63LE-1-B32N/100-A	SGRM-63LE-1-C32N/100-A	SGRM-63LE-1-D32N/100-A	
	40		SGRM-63LE-1-B40N/100-A	SGRM-63LE-1-C40N/100-A	SGRM-63LE-1-D40N/100-A	
	50		SGRM-63LE-1-B50N/100-A	SGRM-63LE-1-C50N/100-A	SGRM-63LE-1-D50N/100-A	
	63		SGRM-63LE-1-B63N/100-A	SGRM-63LE-1-C63N/100-A	SGRM-63LE-1-D63N/100-A	
	6	300mA	SGRM-63LE-1-B6N/300-A	SGRM-63LE-1-C6N/300-A	SGRM-63LE-1-D6N/300-A	
	10		SGRM-63LE-1-B10N/300-A	SGRM-63LE-1-C10N/300-A	SGRM-63LE-1-D10N/300-A	
	16		SGRM-63LE-1-B16N/300-A	SGRM-63LE-1-C16N/300-A	SGRM-63LE-1-D16N/300-A	
	20		SGRM-63LE-1-B20N/300-A	SGRM-63LE-1-C20N/300-A	SGRM-63LE-1-D20N/300-A	
	25		SGRM-63LE-1-B25N/300-A	SGRM-63LE-1-C25N/300-A	SGRM-63LE-1-D25N/300-A	
	32		SGRM-63LE-1-B32N/300-A	SGRM-63LE-1-C32N/300-A	SGRM-63LE-1-D32N/300-A	
	40		SGRM-63LE-1-B40N/300-A	SGRM-63LE-1-C40N/300-A	SGRM-63LE-1-D40N/300-A	
	50		SGRM-63LE-1-B50N/300-A	SGRM-63LE-1-C50N/300-A	SGRM-63LE-1-D50N/300-A	
	63		SGRM-63LE-1-B63N/300-A	SGRM-63LE-1-C63N/300-A	SGRM-63LE-1-D63N/300-A	

SGRM-63LE Series Residual Current Circuit Breakers with Overcurrent Protection

	Rated current(A)	IΔn	Type A			Packing unit
			B curve	C curve	D curve	
 Type A	6	10mA	SGRM-63LE-2-B6/10-A	SGRM-63LE-2-C6/10-A	SGRM-63LE-2-D6/10-A	1
	10		SGRM-63LE-2-B10/10-A	SGRM-63LE-2-C10/10-A	SGRM-63LE-2-D10/10-A	
	16		SGRM-63LE-2-B16/10-A	SGRM-63LE-2-C16/10-A	SGRM-63LE-2-D16/10-A	
	20		SGRM-63LE-2-B20/10-A	SGRM-63LE-2-C20/10-A	SGRM-63LE-2-D20/10-A	
	25		SGRM-63LE-2-B25/10-A	SGRM-63LE-2-C25/10-A	SGRM-63LE-2-D25/10-A	
	32		SGRM-63LE-2-B32/10-A	SGRM-63LE-2-C32/10-A	SGRM-63LE-2-D32/10-A	
	40		SGRM-63LE-2-B40/10-A	SGRM-63LE-2-C40/10-A	SGRM-63LE-2-D40/10-A	
	50		SGRM-63LE-2-B50/10-A	SGRM-63LE-2-C50/10-A	SGRM-63LE-2-D50/10-A	
	63		SGRM-63LE-2-B63/10-A	SGRM-63LE-2-C63/10-A	SGRM-63LE-2-D63/10-A	
	6	30mA	SGRM-63LE-2-B6/30-A	SGRM-63LE-2-C6/30-A	SGRM-63LE-2-D6/30-A	
	10		SGRM-63LE-2-B10/30-A	SGRM-63LE-2-C10/30-A	SGRM-63LE-2-D10/30-A	
	16		SGRM-63LE-2-B16/30-A	SGRM-63LE-2-C16/30-A	SGRM-63LE-2-D16/30-A	
	20		SGRM-63LE-2-B20/30-A	SGRM-63LE-2-C20/30-A	SGRM-63LE-2-D20/30-A	
	25		SGRM-63LE-2-B25/30-A	SGRM-63LE-2-C25/30-A	SGRM-63LE-2-D25/30-A	
	32		SGRM-63LE-2-B32/30-A	SGRM-63LE-2-C32/30-A	SGRM-63LE-2-D32/30-A	
	40		SGRM-63LE-2-B40/30-A	SGRM-63LE-2-C40/30-A	SGRM-63LE-2-D40/30-A	
	50		SGRM-63LE-2-B50/30-A	SGRM-63LE-2-C50/30-A	SGRM-63LE-2-D50/30-A	
	63		SGRM-63LE-2-B63/30-A	SGRM-63LE-2-C63/30-A	SGRM-63LE-2-D63/30-A	
	6	100mA	SGRM-63LE-2-B6/100-A	SGRM-63LE-2-C6/100-A	SGRM-63LE-2-D6/100-A	
	10		SGRM-63LE-2-B10/100-A	SGRM-63LE-2-C10/100-A	SGRM-63LE-2-D10/100-A	
	16		SGRM-63LE-2-B16/100-A	SGRM-63LE-2-C16/100-A	SGRM-63LE-2-D16/100-A	
	20		SGRM-63LE-2-B20/100-A	SGRM-63LE-2-C20/100-A	SGRM-63LE-2-D20/100-A	
	25		SGRM-63LE-2-B25/100-A	SGRM-63LE-2-C25/100-A	SGRM-63LE-2-D25/100-A	
	32		SGRM-63LE-2-B32/100-A	SGRM-63LE-2-C32/100-A	SGRM-63LE-2-D32/100-A	
	40		SGRM-63LE-2-B40/100-A	SGRM-63LE-2-C40/100-A	SGRM-63LE-2-D40/100-A	
	50		SGRM-63LE-2-B50/100-A	SGRM-63LE-2-C50/100-A	SGRM-63LE-2-D50/100-A	
	63		SGRM-63LE-2-B63/100-A	SGRM-63LE-2-C63/100-A	SGRM-63LE-2-D63/100-A	
	6	300mA	SGRM-63LE-2-B6/300-A	SGRM-63LE-2-C6/300-A	SGRM-63LE-2-D6/300-A	
	10		SGRM-63LE-2-B10/300-A	SGRM-63LE-2-C10/300-A	SGRM-63LE-2-D10/300-A	
	16		SGRM-63LE-2-B16/300-A	SGRM-63LE-2-C16/300-A	SGRM-63LE-2-D16/300-A	
	20		SGRM-63LE-2-B20/300-A	SGRM-63LE-2-C20/300-A	SGRM-63LE-2-D20/300-A	
	25		SGRM-63LE-2-B25/300-A	SGRM-63LE-2-C25/300-A	SGRM-63LE-2-D25/300-A	
	32		SGRM-63LE-2-B32/300-A	SGRM-63LE-2-C32/300-A	SGRM-63LE-2-D32/300-A	
	40		SGRM-63LE-2-B40/300-A	SGRM-63LE-2-C40/300-A	SGRM-63LE-2-D40/300-A	
	50		SGRM-63LE-2-B50/300-A	SGRM-63LE-2-C50/300-A	SGRM-63LE-2-D50/300-A	
	63		SGRM-63LE-2-B63/300-A	SGRM-63LE-2-C63/300-A	SGRM-63LE-2-D63/300-A	

SGRM-63LE Series Residual Current Circuit Breakers with Overcurrent Protection

	Rated current(A)	IΔn	Type A			Packing unit
			B curve	C curve	D curve	
	6	10mA	SGRM-63LE-3-B6/10-A	SGRM-63LE-3-C6/10-A	SGRM-63LE-3-D6/10-A	
	10		SGRM-63LE-3-B10/10-A	SGRM-63LE-3-C10/10-A	SGRM-63LE-3-D10/10-A	
	16		SGRM-63LE-3-B16/10-A	SGRM-63LE-3-C16/10-A	SGRM-63LE-3-D16/10-A	
	20		SGRM-63LE-3-B20/10-A	SGRM-63LE-3-C20/10-A	SGRM-63LE-3-D20/10-A	
	25		SGRM-63LE-3-B25/10-A	SGRM-63LE-3-C25/10-A	SGRM-63LE-3-D25/10-A	
	32		SGRM-63LE-3-B32/10-A	SGRM-63LE-3-C32/10-A	SGRM-63LE-3-D32/10-A	
	40		SGRM-63LE-3-B40/10-A	SGRM-63LE-3-C40/10-A	SGRM-63LE-3-D40/10-A	
	50		SGRM-63LE-3-B50/10-A	SGRM-63LE-3-C50/10-A	SGRM-63LE-3-D50/10-A	
	63		SGRM-63LE-3-B63/10-A	SGRM-63LE-3-C63/10-A	SGRM-63LE-3-D63/10-A	
	6	30mA	SGRM-63LE-3-B6/30-A	SGRM-63LE-3-C6/30-A	SGRM-63LE-3-D6/30-A	
	10		SGRM-63LE-3-B10/30-A	SGRM-63LE-3-C10/30-A	SGRM-63LE-3-D10/30-A	
	16		SGRM-63LE-3-B16/30-A	SGRM-63LE-3-C16/30-A	SGRM-63LE-3-D16/30-A	
	20		SGRM-63LE-3-B20/30-A	SGRM-63LE-3-C20/30-A	SGRM-63LE-3-D20/30-A	
	25		SGRM-63LE-3-B25/30-A	SGRM-63LE-3-C25/30-A	SGRM-63LE-3-D25/30-A	
	32		SGRM-63LE-3-B32/30-A	SGRM-63LE-3-C32/30-A	SGRM-63LE-3-D32/30-A	
	40		SGRM-63LE-3-B40/30-A	SGRM-63LE-3-C40/30-A	SGRM-63LE-3-D40/30-A	
	50		SGRM-63LE-3-B50/30-A	SGRM-63LE-3-C50/30-A	SGRM-63LE-3-D50/30-A	
	63		SGRM-63LE-3-B63/30-A	SGRM-63LE-3-C63/30-A	SGRM-63LE-3-D63/30-A	
	6	100mA	SGRM-63LE-3-B6/100-A	SGRM-63LE-3-C6/100-A	SGRM-63LE-3-D6/100-A	1
	10		SGRM-63LE-3-B10/100-A	SGRM-63LE-3-C10/100-A	SGRM-63LE-3-D10/100-A	
	16		SGRM-63LE-3-B16/100-A	SGRM-63LE-3-C16/100-A	SGRM-63LE-3-D16/100-A	
	20		SGRM-63LE-3-B20/100-A	SGRM-63LE-3-C20/100-A	SGRM-63LE-3-D20/100-A	
	25		SGRM-63LE-3-B25/100-A	SGRM-63LE-3-C25/100-A	SGRM-63LE-3-D25/100-A	
	32		SGRM-63LE-3-B32/100-A	SGRM-63LE-3-C32/100-A	SGRM-63LE-3-D32/100-A	
	40		SGRM-63LE-3-B40/100-A	SGRM-63LE-3-C40/100-A	SGRM-63LE-3-D40/100-A	
	50		SGRM-63LE-3-B50/100-A	SGRM-63LE-3-C50/100-A	SGRM-63LE-3-D50/100-A	
	63		SGRM-63LE-3-B63/100-A	SGRM-63LE-3-C63/100-A	SGRM-63LE-3-D63/100-A	
	6	300mA	SGRM-63LE-3-B6/300-A	SGRM-63LE-3-C6/300-A	SGRM-63LE-3-D6/300-A	
	10		SGRM-63LE-3-B10/300-A	SGRM-63LE-3-C10/300-A	SGRM-63LE-3-D10/300-A	
	16		SGRM-63LE-3-B16/300-A	SGRM-63LE-3-C16/300-A	SGRM-63LE-3-D16/300-A	
	20		SGRM-63LE-3-B20/300-A	SGRM-63LE-3-C20/300-A	SGRM-63LE-3-D20/300-A	
	25		SGRM-63LE-3-B25/300-A	SGRM-63LE-3-C25/300-A	SGRM-63LE-3-D25/300-A	
	32		SGRM-63LE-3-B32/300-A	SGRM-63LE-3-C32/300-A	SGRM-63LE-3-D32/300-A	
	40		SGRM-63LE-3-B40/300-A	SGRM-63LE-3-C40/300-A	SGRM-63LE-3-D40/300-A	
	50		SGRM-63LE-3-B50/300-A	SGRM-63LE-3-C50/300-A	SGRM-63LE-3-D50/300-A	
	63		SGRM-63LE-3-B63/300-A	SGRM-63LE-3-C63/300-A	SGRM-63LE-3-D63/300-A	

Type A

SGRM-63LE Series Residual Current Circuit Breakers with Overcurrent Protection

	Rated current(A)	IΔn	Type A			Packing unit
			B curve	C curve	D curve	
	6	10mA	SGRM-63LE-3-B6N/10-A	SGRM-63LE-3-C6N/10-A	SGRM-63LE-3-D6N/10-A	
	10		SGRM-63LE-3-B10N/10-A	SGRM-63LE-3-C10N/10-A	SGRM-63LE-3-D10N/10-A	
	16		SGRM-63LE-3-B16N/10-A	SGRM-63LE-3-C16N/10-A	SGRM-63LE-3-D16N/10-A	
	20		SGRM-63LE-3-B20N/10-A	SGRM-63LE-3-C20N/10-A	SGRM-63LE-3-D20N/10-A	
	25		SGRM-63LE-3-B25N/10-A	SGRM-63LE-3-C25N/10-A	SGRM-63LE-3-D25N/10-A	
	32		SGRM-63LE-3-B32N/10-A	SGRM-63LE-3-C32N/10-A	SGRM-63LE-3-D32N/10-A	
	40		SGRM-63LE-3-B40N/10-A	SGRM-63LE-3-C40N/10-A	SGRM-63LE-3-D40N/10-A	
	50		SGRM-63LE-3-B50N/10-A	SGRM-63LE-3-C50N/10-A	SGRM-63LE-3-D50N/10-A	
	63		SGRM-63LE-3-B63N/10-A	SGRM-63LE-3-C63N/10-A	SGRM-63LE-3-D63N/10-A	
	6	30mA	SGRM-63LE-3-B6N/30-A	SGRM-63LE-3-C6N/30-A	SGRM-63LE-3-D6N/30-A	
	10		SGRM-63LE-3-B10N/30-A	SGRM-63LE-3-C10N/30-A	SGRM-63LE-3-D10N/30-A	
	16		SGRM-63LE-3-B16N/30-A	SGRM-63LE-3-C16N/30-A	SGRM-63LE-3-D16N/30-A	
	20		SGRM-63LE-3-B20N/30-A	SGRM-63LE-3-C20N/30-A	SGRM-63LE-3-D20N/30-A	
	25		SGRM-63LE-3-B25N/30-A	SGRM-63LE-3-C25N/30-A	SGRM-63LE-3-D25N/30-A	
	32		SGRM-63LE-3-B32N/30-A	SGRM-63LE-3-C32N/30-A	SGRM-63LE-3-D32N/30-A	
	40		SGRM-63LE-3-B40N/30-A	SGRM-63LE-3-C40N/30-A	SGRM-63LE-3-D40N/30-A	
	50		SGRM-63LE-3-B50N/30-A	SGRM-63LE-3-C50N/30-A	SGRM-63LE-3-D50N/30-A	
	63		SGRM-63LE-3-B63N/30-A	SGRM-63LE-3-C63N/30-A	SGRM-63LE-3-D63N/30-A	
	6	100mA	SGRM-63LE-3-B6N/100-A	SGRM-63LE-3-C6N/100-A	SGRM-63LE-3-D6N/100-A	1
	10		SGRM-63LE-3-B10N/100-A	SGRM-63LE-3-C10N/100-A	SGRM-63LE-3-D10N/100-A	
	16		SGRM-63LE-3-B16N/100-A	SGRM-63LE-3-C16N/100-A	SGRM-63LE-3-D16N/100-A	
	20		SGRM-63LE-3-B20N/100-A	SGRM-63LE-3-C20N/100-A	SGRM-63LE-3-D20N/100-A	
	25		SGRM-63LE-3-B25N/100-A	SGRM-63LE-3-C25N/100-A	SGRM-63LE-3-D25N/100-A	
	32		SGRM-63LE-3-B32N/100-A	SGRM-63LE-3-C32N/100-A	SGRM-63LE-3-D32N/100-A	
	40		SGRM-63LE-3-B40N/100-A	SGRM-63LE-3-C40N/100-A	SGRM-63LE-3-D40N/100-A	
	50		SGRM-63LE-3-B50N/100-A	SGRM-63LE-3-C50N/100-A	SGRM-63LE-3-D50N/100-A	
	63		SGRM-63LE-3-B63N/100-A	SGRM-63LE-3-C63N/100-A	SGRM-63LE-3-D63N/100-A	
	6	300mA	SGRM-63LE-3-B6N/300-A	SGRM-63LE-3-C6N/300-A	SGRM-63LE-3-D6N/300-A	
	10		SGRM-63LE-3-B10N/300-A	SGRM-63LE-3-C10N/300-A	SGRM-63LE-3-D10N/300-A	
	16		SGRM-63LE-3-B16N/300-A	SGRM-63LE-3-C16N/300-A	SGRM-63LE-3-D16N/300-A	
	20		SGRM-63LE-3-B20N/300-A	SGRM-63LE-3-C20N/300-A	SGRM-63LE-3-D20N/300-A	
	25		SGRM-63LE-3-B25N/300-A	SGRM-63LE-3-C25N/300-A	SGRM-63LE-3-D25N/300-A	
	32		SGRM-63LE-3-B32N/300-A	SGRM-63LE-3-C32N/300-A	SGRM-63LE-3-D32N/300-A	
	40		SGRM-63LE-3-B40N/300-A	SGRM-63LE-3-C40N/300-A	SGRM-63LE-3-D40N/300-A	
	50		SGRM-63LE-3-B50N/300-A	SGRM-63LE-3-C50N/300-A	SGRM-63LE-3-D50N/300-A	
	63		SGRM-63LE-3-B63N/300-A	SGRM-63LE-3-C63N/300-A	SGRM-63LE-3-D63N/300-A	

Type A

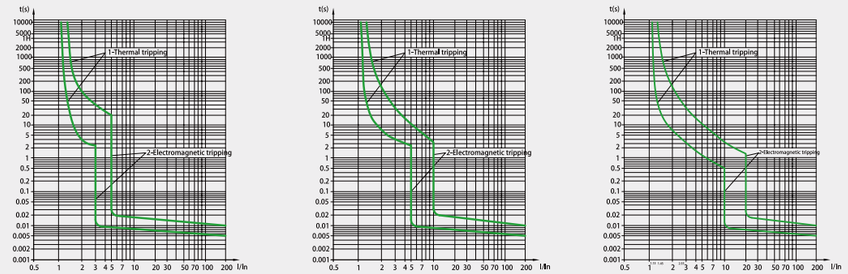
SGRM-63LE Series Residual Current Circuit Breakers with Overcurrent Protection

	Rated current(A)	IΔn	Type A			Packing unit
			B curve	C curve	D curve	
	6	10mA	SGRM-63LE-4-B6/10-A	SGRM-63LE-4-C6/10-A	SGRM-63LE-4-D6/10-A	
	10		SGRM-63LE-4-B10/10-A	SGRM-63LE-4-C10/10-A	SGRM-63LE-4-D10/10-A	
	16		SGRM-63LE-4-B16/10-A	SGRM-63LE-4-C16/10-A	SGRM-63LE-4-D16/10-A	
	20		SGRM-63LE-4-B20/10-A	SGRM-63LE-4-C20/10-A	SGRM-63LE-4-D20/10-A	
	25		SGRM-63LE-4-B25/10-A	SGRM-63LE-4-C25/10-A	SGRM-63LE-4-D25/10-A	
	32		SGRM-63LE-4-B32/10-A	SGRM-63LE-4-C32/10-A	SGRM-63LE-4-D32/10-A	
	40		SGRM-63LE-4-B40/10-A	SGRM-63LE-4-C40/10-A	SGRM-63LE-4-D40/10-A	
	50		SGRM-63LE-4-B50/10-A	SGRM-63LE-4-C50/10-A	SGRM-63LE-4-D50/10-A	
	63		SGRM-63LE-4-B63/10-A	SGRM-63LE-4-C63/10-A	SGRM-63LE-4-D63/10-A	
	6	30mA	SGRM-63LE-4-B6/30-A	SGRM-63LE-4-C6/30-A	SGRM-63LE-4-D6/30-A	
	10		SGRM-63LE-4-B10/30-A	SGRM-63LE-4-C10/30-A	SGRM-63LE-4-D10/30-A	
	16		SGRM-63LE-4-B16/30-A	SGRM-63LE-4-C16/30-A	SGRM-63LE-4-D16/30-A	
	20		SGRM-63LE-4-B20/30-A	SGRM-63LE-4-C20/30-A	SGRM-63LE-4-D20/30-A	
	25		SGRM-63LE-4-B25/30-A	SGRM-63LE-4-C25/30-A	SGRM-63LE-4-D25/30-A	
	32		SGRM-63LE-4-B32/30-A	SGRM-63LE-4-C32/30-A	SGRM-63LE-4-D32/30-A	
	40		SGRM-63LE-4-B40/30-A	SGRM-63LE-4-C40/30-A	SGRM-63LE-4-D40/30-A	
	50		SGRM-63LE-4-B50/30-A	SGRM-63LE-4-C50/30-A	SGRM-63LE-4-D50/30-A	
	63		SGRM-63LE-4-B63/30-A	SGRM-63LE-4-C63/30-A	SGRM-63LE-4-D63/30-A	
	6	100mA	SGRM-63LE-4-B6/100-A	SGRM-63LE-4-C6/100-A	SGRM-63LE-4-D6/100-A	1
	10		SGRM-63LE-4-B10/100-A	SGRM-63LE-4-C10/100-A	SGRM-63LE-4-D10/100-A	
	16		SGRM-63LE-4-B16/100-A	SGRM-63LE-4-C16/100-A	SGRM-63LE-4-D16/100-A	
	20		SGRM-63LE-4-B20/100-A	SGRM-63LE-4-C20/100-A	SGRM-63LE-4-D20/100-A	
	25		SGRM-63LE-4-B25/100-A	SGRM-63LE-4-C25/100-A	SGRM-63LE-4-D25/100-A	
	32		SGRM-63LE-4-B32/100-A	SGRM-63LE-4-C32/100-A	SGRM-63LE-4-D32/100-A	
	40		SGRM-63LE-4-B40/100-A	SGRM-63LE-4-C40/100-A	SGRM-63LE-4-D40/100-A	
	50		SGRM-63LE-4-B50/100-A	SGRM-63LE-4-C50/100-A	SGRM-63LE-4-D50/100-A	
	63		SGRM-63LE-4-B63/100-A	SGRM-63LE-4-C63/100-A	SGRM-63LE-4-D63/100-A	
	6	300mA	SGRM-63LE-4-B6/300-A	SGRM-63LE-4-C6/300-A	SGRM-63LE-4-D6/300-A	
	10		SGRM-63LE-4-B10/300-A	SGRM-63LE-4-C10/300-A	SGRM-63LE-4-D10/300-A	
	16		SGRM-63LE-4-B16/300-A	SGRM-63LE-4-C16/300-A	SGRM-63LE-4-D16/300-A	
	20		SGRM-63LE-4-B20/300-A	SGRM-63LE-4-C20/300-A	SGRM-63LE-4-D20/300-A	
	25		SGRM-63LE-4-B25/300-A	SGRM-63LE-4-C25/300-A	SGRM-63LE-4-D25/300-A	
	32		SGRM-63LE-4-B32/300-A	SGRM-63LE-4-C32/300-A	SGRM-63LE-4-D32/300-A	
	40		SGRM-63LE-4-B40/300-A	SGRM-63LE-4-C40/300-A	SGRM-63LE-4-D40/300-A	
	50		SGRM-63LE-4-B50/300-A	SGRM-63LE-4-C50/300-A	SGRM-63LE-4-D50/300-A	
	63		SGRM-63LE-4-B63/300-A	SGRM-63LE-4-C63/300-A	SGRM-63LE-4-D63/300-A	

Type A

SGRM-63LE Series Residual Current Circuit Breakers with Overcurrent Protection

Curves



B type C type D type

Breaking time of residual current

Max.breaking time					
In(A)	IΔn(A)	IΔn	2 IΔn	5 IΔn	5-500A
6-63	0.01,0.03,0.1,0.3	0.1s	0.08s	0.04s	0.04s

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

Rated current In (A)	Cross section area s(mm²)	Tightening torque(N.m)
6	1	2.0
10	1.5	
13	1.5	
16-20	2.5	
25	4	
32	6	
40-50	10	
63	16	

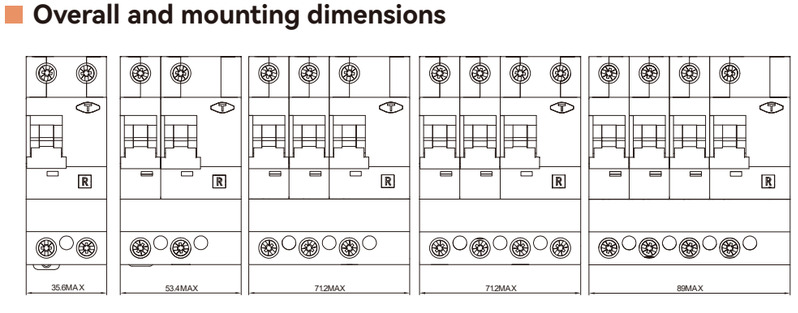
Types

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

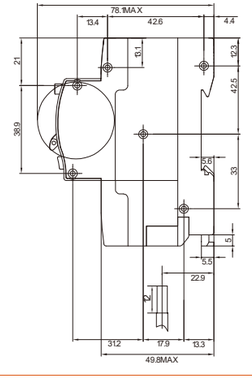
Tripping sensitivity data

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

Overall and mounting dimensions



SGRM-63LE



SGBRi Series Residual Current Circuit Breakers with Overcurrent Protection

Standard		EN/IEC61009-1
Rated conditional short-circuit current(kA)		6,10
Rated current(A),In		6,10,13,16,20,25,32,40
Number of poles		1 P+N(Solid Neutral)
Rated sensitivity currents(mA),I∆n		10,30,100,300
Tripping curve		B,C
Rated residual non-operating current		0.5XI∆n
Rated impulse withstand voltage Uimp(kV)		4
Rated voltage(V)		AC 230/240
Ambient temperature (℃)		-25~+40,Max.95%humidity
Residual current off time		≤0.1s
Type of trip	Ground fault	Electronic
	Over current	Thermal-magnetic
Electrical endurance		4000
Mechanical endurance		10000
Terminal capacity		10mm² flexible/16mm² rigid
Protection degree		IP20
Installation		35mm DIN rail
Certification		Intertek CE CB

SGBRi-6K

SGBRi-10K

SGBRi-6K Residual Current Circuit Breakers with Overcurrent Protection

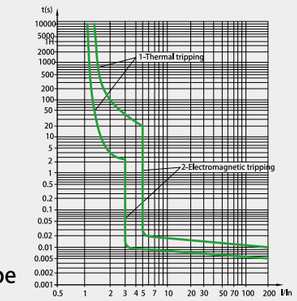
	Rated current(A)	I∆n	Type AC B curve	Type AC C curve	Type A B curve	Type A C curve	Packing unit
 Type AC	6	10mA	SGBRi-6K/B6/10	SGBRi-6K/C6/10	SGBRi-6K/B6/10-A	SGBRi-6K/C6/10-A	5
	10		SGBRi-6K/B10/10	SGBRi-6K/C10/10	SGBRi-6K/B10/10-A	SGBRi-6K/C10/10-A	
	13		SGBRi-6K/B13/10	SGBRi-6K/C13/10	SGBRi-6K/B13/10-A	SGBRi-6K/C13/10-A	
	16		SGBRi-6K/B16/10	SGBRi-6K/C16/10	SGBRi-6K/B16/10-A	SGBRi-6K/C16/10-A	
	20		SGBRi-6K/B20/10	SGBRi-6K/C20/10	SGBRi-6K/B20/10-A	SGBRi-6K/C20/10-A	
	25		SGBRi-6K/B25/10	SGBRi-6K/C25/10	SGBRi-6K/B25/10-A	SGBRi-6K/C25/10-A	
	32		SGBRi-6K/B32/10	SGBRi-6K/C32/10	SGBRi-6K/B32/10-A	SGBRi-6K/C32/10-A	
	40		SGBRi-6K/B40/10	SGBRi-6K/C40/10	SGBRi-6K/B40/10-A	SGBRi-6K/C40/10-A	
	6	30mA	SGBRi-6K/B6/30	SGBRi-6K/C6/30	SGBRi-6K/B6/30-A	SGBRi-6K/C6/30-A	
	10		SGBRi-6K/B10/30	SGBRi-6K/C10/30	SGBRi-6K/B10/30-A	SGBRi-6K/C10/30-A	
	13		SGBRi-6K/B13/30	SGBRi-6K/C13/30	SGBRi-6K/B13/30-A	SGBRi-6K/C13/30-A	
	16		SGBRi-6K/B16/30	SGBRi-6K/C16/30	SGBRi-6K/B16/30-A	SGBRi-6K/C16/30-A	
	20		SGBRi-6K/B20/30	SGBRi-6K/C20/30	SGBRi-6K/B20/30-A	SGBRi-6K/C20/30-A	
	25		SGBRi-6K/B25/30	SGBRi-6K/C25/30	SGBRi-6K/B25/30-A	SGBRi-6K/C25/30-A	
	32		SGBRi-6K/B32/30	SGBRi-6K/C32/30	SGBRi-6K/B32/30-A	SGBRi-6K/C32/30-A	
	40		SGBRi-6K/B40/30	SGBRi-6K/C40/30	SGBRi-6K/B40/30-A	SGBRi-6K/C40/30-A	
 Type A	6	100mA	SGBRi-6K/B6/100	SGBRi-6K/C6/100	SGBRi-6K/B6/100-A	SGBRi-6K/C6/100-A	
	10		SGBRi-6K/B10/100	SGBRi-6K/C10/100	SGBRi-6K/B10/100-A	SGBRi-6K/C10/100-A	
	13		SGBRi-6K/B13/100	SGBRi-6K/C13/100	SGBRi-6K/B13/100-A	SGBRi-6K/C13/100-A	
	16		SGBRi-6K/B16/100	SGBRi-6K/C16/100	SGBRi-6K/B16/100-A	SGBRi-6K/C16/100-A	
	20		SGBRi-6K/B20/100	SGBRi-6K/C20/100	SGBRi-6K/B20/100-A	SGBRi-6K/C20/100-A	
	25		SGBRi-6K/B25/100	SGBRi-6K/C25/100	SGBRi-6K/B25/100-A	SGBRi-6K/C25/100-A	
	32		SGBRi-6K/B32/100	SGBRi-6K/C32/100	SGBRi-6K/B32/100-A	SGBRi-6K/C32/100-A	
	40		SGBRi-6K/B40/100	SGBRi-6K/C40/100	SGBRi-6K/B40/100-A	SGBRi-6K/C40/100-A	
	6	300mA	SGBRi-6K/B6/300	SGBRi-6K/C6/300	SGBRi-6K/B6/300-A	SGBRi-6K/C6/300-A	
	10		SGBRi-6K/B10/300	SGBRi-6K/C10/300	SGBRi-6K/B10/300-A	SGBRi-6K/C10/300-A	
	13		SGBRi-6K/B13/300	SGBRi-6K/C13/300	SGBRi-6K/B13/300-A	SGBRi-6K/C13/300-A	
	16		SGBRi-6K/B16/300	SGBRi-6K/C16/300	SGBRi-6K/B16/300-A	SGBRi-6K/C16/300-A	
	20		SGBRi-6K/B20/300	SGBRi-6K/C20/300	SGBRi-6K/B20/300-A	SGBRi-6K/C20/300-A	
	25		SGBRi-6K/B25/300	SGBRi-6K/C25/300	SGBRi-6K/B25/300-A	SGBRi-6K/C25/300-A	
	32		SGBRi-6K/B32/300	SGBRi-6K/C32/300	SGBRi-6K/B32/300-A	SGBRi-6K/C32/300-A	
	40		SGBRi-6K/B40/300	SGBRi-6K/C40/300	SGBRi-6K/B40/300-A	SGBRi-6K/C40/300-A	

SGBRi-10K Residual Current Circuit Breakers with Overcurrent Protection

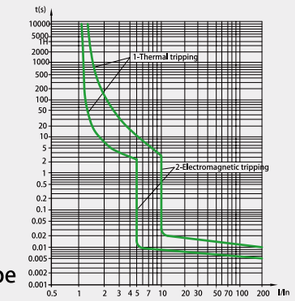
	Rated current(A)	IΔn	Type AC		Type A		Packing unit
			B curve	C curve	B curve	C curve	
 Type AC	6	10mA	SGBRi-10K/B6/10	SGBRi-10K/C6/10	SGBRi-10K/B6/10-A	SGBRi-10K/C6/10-A	
	10		SGBRi-10K/B10/10	SGBRi-10K/C10/10	SGBRi-10K/B10/10-A	SGBRi-10K/C10/10-A	
	13		SGBRi-10K/B13/10	SGBRi-10K/C13/10	SGBRi-10K/B13/10-A	SGBRi-10K/C13/10-A	
	16		SGBRi-10K/B16/10	SGBRi-10K/C16/10	SGBRi-10K/B16/10-A	SGBRi-10K/C16/10-A	
	20		SGBRi-10K/B20/10	SGBRi-10K/C20/10	SGBRi-10K/B20/10-A	SGBRi-10K/C20/10-A	
	25		SGBRi-10K/B25/10	SGBRi-10K/C25/10	SGBRi-10K/B25/10-A	SGBRi-10K/C25/10-A	
	32		SGBRi-10K/B32/10	SGBRi-10K/C32/10	SGBRi-10K/B32/10-A	SGBRi-10K/C32/10-A	
	40		SGBRi-10K/B40/10	SGBRi-10K/C40/10	SGBRi-10K/B40/10-A	SGBRi-10K/C40/10-A	
	6	30mA	SGBRi-10K/B6/30	SGBRi-10K/C6/30	SGBRi-10K/B6/30-A	SGBRi-10K/C6/30-A	
	10		SGBRi-10K/B10/30	SGBRi-10K/C10/30	SGBRi-10K/B10/30-A	SGBRi-10K/C10/30-A	
	13		SGBRi-10K/B13/30	SGBRi-10K/C13/30	SGBRi-10K/B13/30-A	SGBRi-10K/C13/30-A	
	16		SGBRi-10K/B16/30	SGBRi-10K/C16/30	SGBRi-10K/B16/30-A	SGBRi-10K/C16/30-A	
	20		SGBRi-10K/B20/30	SGBRi-10K/C20/30	SGBRi-10K/B20/30-A	SGBRi-10K/C20/30-A	
	25		SGBRi-10K/B25/30	SGBRi-10K/C25/30	SGBRi-10K/B25/30-A	SGBRi-10K/C25/30-A	
	32		SGBRi-10K/B32/30	SGBRi-10K/C32/30	SGBRi-10K/B32/30-A	SGBRi-10K/C32/30-A	
	40		SGBRi-10K/B40/30	SGBRi-10K/C40/30	SGBRi-10K/B40/30-A	SGBRi-10K/C40/30-A	
 Type A	6	100mA	SGBRi-10K/B6/100	SGBRi-10K/C6/100	SGBRi-10K/B6/100-A	SGBRi-10K/C6/100-A	5
	10		SGBRi-10K/B10/100	SGBRi-10K/C10/100	SGBRi-10K/B10/100-A	SGBRi-10K/C10/100-A	
	13		SGBRi-10K/B13/100	SGBRi-10K/C13/100	SGBRi-10K/B13/100-A	SGBRi-10K/C13/100-A	
	16		SGBRi-10K/B16/100	SGBRi-10K/C16/100	SGBRi-10K/B16/100-A	SGBRi-10K/C16/100-A	
	20		SGBRi-10K/B20/100	SGBRi-10K/C20/100	SGBRi-10K/B20/100-A	SGBRi-10K/C20/100-A	
	25		SGBRi-10K/B25/100	SGBRi-10K/C25/100	SGBRi-10K/B25/100-A	SGBRi-10K/C25/100-A	
	32		SGBRi-10K/B32/100	SGBRi-10K/C32/100	SGBRi-10K/B32/100-A	SGBRi-10K/C32/100-A	
	40		SGBRi-10K/B40/100	SGBRi-10K/C40/100	SGBRi-10K/B40/100-A	SGBRi-10K/C40/100-A	
	6	300mA	SGBRi-10K/B6/300	SGBRi-10K/C6/300	SGBRi-10K/B6/300-A	SGBRi-10K/C6/300-A	
	10		SGBRi-10K/B10/300	SGBRi-10K/C10/300	SGBRi-10K/B10/300-A	SGBRi-10K/C10/300-A	
	13		SGBRi-10K/B13/300	SGBRi-10K/C13/300	SGBRi-10K/B13/300-A	SGBRi-10K/C13/300-A	
	16		SGBRi-10K/B16/300	SGBRi-10K/C16/300	SGBRi-10K/B16/300-A	SGBRi-10K/C16/300-A	
	20		SGBRi-10K/B20/300	SGBRi-10K/C20/300	SGBRi-10K/B20/300-A	SGBRi-10K/C20/300-A	
	25		SGBRi-10K/B25/300	SGBRi-10K/C25/300	SGBRi-10K/B25/300-A	SGBRi-10K/C25/300-A	
	32		SGBRi-10K/B32/300	SGBRi-10K/C32/300	SGBRi-10K/B32/300-A	SGBRi-10K/C32/300-A	
	40		SGBRi-10K/B40/300	SGBRi-10K/C40/300	SGBRi-10K/B40/300-A	SGBRi-10K/C40/300-A	

SGBRi Series Residual Current Circuit Breakers with Overcurrent Protection

Curves



B type



C type

Breaking time of residual current

Max.breaking time					
In(A)	IΔn(A)	IΔn	2 IΔn	5 IΔn	5-500A
6-40	0.01,0.03,0.1,0.3	0.1s	0.08s	0.04s	0.04s

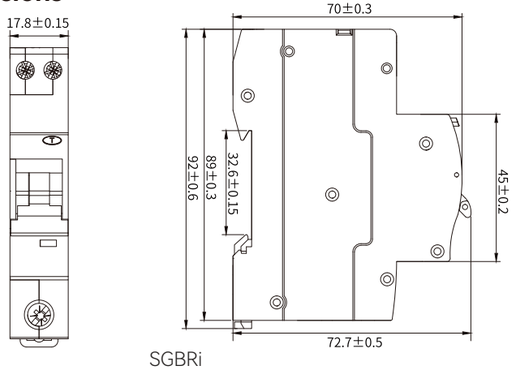
Wiring (The suitable conductors should be used for connection,see table below for relative parameters)

Rated current In (A)	Cross section area s(mm²)	Tightening torque(N.m)
6	1	M5 2.0 M4 1.2
10	1.5	
16-20	2.5	
25	4	
32	6	
40	10	

Features

Switching and isolation function.
Protection against overload and short-circuit currents.
Protection against the effects of sinusoidal alternating earth fault currents.
Protection against indirect contacts and additional protection against direct contacts.
Protection against fire hazard caused by insulation faults.
Used in residential building and distribution boards.

Overall and mounting dimensions



SGBRi

SGBR-40L Series Residual Current Circuit Breakers with Overcurrent Protection

Standard		EN/IEC61009-1
Rated conditional short-circuit current(kA)		6
Rated current(A),In		6,10,13,16,20,25,32,40
Number of poles		1P+N(Switched Neutral)
Rated sensitivity currents(mA),I∆n		10,30,100,300
Tripping curve		B,C
Rated residual non-operating current		0.5XI∆n
Rated impulse withstand voltage Uimp(kV)		4
Rated voltage(V)		AC 230/240
Ambient temperature (℃)		-25~+40,Max.95%humidity
Residual current off time		≤0.1s
Type of trip	Ground fault	Electronic
	Over current	Thermal-magnetic
Electrical endurance		4000
Mechanical endurance		10000
Terminal capacity		10mm² flexible/16mm² rigid
Protection degree		IP20
Installation		35mm DIN rail
Certification		Intertek CE CB

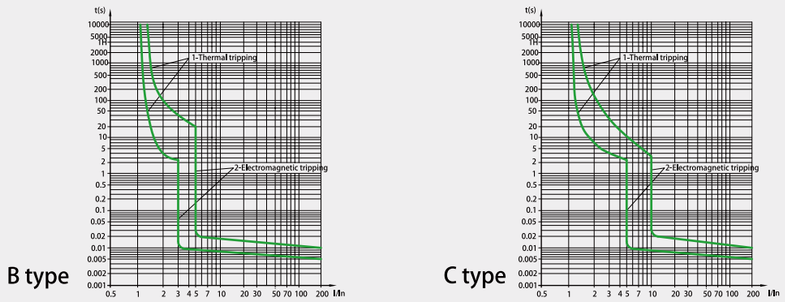
SGBR-40L

SGBR-40L Series Residual Current Circuit Breakers with Overcurrent Protection

	Rated current(A)	I∆n	Type AC B curve	Type AC C curve	Type A B curve	Type A C curve	Packing unit
 Type AC	6	10mA	SGBR-40L/B6/10	SGBR-40L/C6/10	SGBR-40L/B6/10-A	SGBR-40L/C6/10-A	1
	10		SGBR-40L/B10/10	SGBR-40L/C10/10	SGBR-40L/B10/10-A	SGBR-40L/C10/10-A	
	13		SGBR-40L/B13/10	SGBR-40L/C13/10	SGBR-40L/B13/10-A	SGBR-40L/C13/10-A	
	16		SGBR-40L/B16/10	SGBR-40L/C16/10	SGBR-40L/B16/10-A	SGBR-40L/C16/10-A	
	20		SGBR-40L/B20/10	SGBR-40L/C20/10	SGBR-40L/B20/10-A	SGBR-40L/C20/10-A	
	25		SGBR-40L/B25/10	SGBR-40L/C25/10	SGBR-40L/B25/10-A	SGBR-40L/C25/10-A	
	32		SGBR-40L/B32/10	SGBR-40L/C32/10	SGBR-40L/B32/10-A	SGBR-40L/C32/10-A	
	40		SGBR-40L/B40/10	SGBR-40L/C40/10	SGBR-40L/B40/10-A	SGBR-40L/C40/10-A	
	6	30mA	SGBR-40L/B6/30	SGBR-40L/C6/30	SGBR-40L/B6/30-A	SGBR-40L/C6/30-A	
	10		SGBR-40L/B10/30	SGBR-40L/C10/30	SGBR-40L/B10/30-A	SGBR-40L/C10/30-A	
	13		SGBR-40L/B13/30	SGBR-40L/C13/30	SGBR-40L/B13/30-A	SGBR-40L/C13/30-A	
	16		SGBR-40L/B16/30	SGBR-40L/C16/30	SGBR-40L/B16/30-A	SGBR-40L/C16/30-A	
	20		SGBR-40L/B20/30	SGBR-40L/C20/30	SGBR-40L/B20/30-A	SGBR-40L/C20/30-A	
	25		SGBR-40L/B25/30	SGBR-40L/C25/30	SGBR-40L/B25/30-A	SGBR-40L/C25/30-A	
	32		SGBR-40L/B32/30	SGBR-40L/C32/30	SGBR-40L/B32/30-A	SGBR-40L/C32/30-A	
	40		SGBR-40L/B40/30	SGBR-40L/C40/30	SGBR-40L/B40/30-A	SGBR-40L/C40/30-A	
 Type A	6	100mA	SGBR-40L/B6/100	SGBR-40L/C6/100	SGBR-40L/B6/100-A	SGBR-40L/C6/100-A	
	10		SGBR-40L/B10/100	SGBR-40L/C10/100	SGBR-40L/B10/100-A	SGBR-40L/C10/100-A	
	13		SGBR-40L/B13/100	SGBR-40L/C13/100	SGBR-40L/B13/100-A	SGBR-40L/C13/100-A	
	16		SGBR-40L/B16/100	SGBR-40L/C16/100	SGBR-40L/B16/100-A	SGBR-40L/C16/100-A	
	20		SGBR-40L/B20/100	SGBR-40L/C20/100	SGBR-40L/B20/100-A	SGBR-40L/C20/100-A	
	25		SGBR-40L/B25/100	SGBR-40L/C25/100	SGBR-40L/B25/100-A	SGBR-40L/C25/100-A	
	32		SGBR-40L/B32/100	SGBR-40L/C32/100	SGBR-40L/B32/100-A	SGBR-40L/C32/100-A	
	40		SGBR-40L/B40/100	SGBR-40L/C40/100	SGBR-40L/B40/100-A	SGBR-40L/C40/100-A	
	6	300mA	SGBR-40L/B6/300	SGBR-40L/C6/300	SGBR-40L/B6/300-A	SGBR-40L/C6/300-A	
	10		SGBR-40L/B10/300	SGBR-40L/C10/300	SGBR-40L/B10/300-A	SGBR-40L/C10/300-A	
	13		SGBR-40L/B13/300	SGBR-40L/C13/300	SGBR-40L/B13/300-A	SGBR-40L/C13/300-A	
	16		SGBR-40L/B16/300	SGBR-40L/C16/300	SGBR-40L/B16/300-A	SGBR-40L/C16/300-A	
	20		SGBR-40L/B20/300	SGBR-40L/C20/300	SGBR-40L/B20/300-A	SGBR-40L/C20/300-A	
	25		SGBR-40L/B25/300	SGBR-40L/C25/300	SGBR-40L/B25/300-A	SGBR-40L/C25/300-A	
	32		SGBR-40L/B32/300	SGBR-40L/C32/300	SGBR-40L/B32/300-A	SGBR-40L/C32/300-A	
	40		SGBR-40L/B40/300	SGBR-40L/C40/300	SGBR-40L/B40/300-A	SGBR-40L/C40/300-A	

SGBR-40L Series Residual Current Circuit Breakers with Overcurrent Protection

Curves



Breaking time of residual current

Max.breaking time					
In(A)	IΔn(A)	IΔn	2 IΔn	5 IΔn	5-500A
6-40	0.01,0.03,0.1,0.3	0.1s	0.08s	0.04s	0.04s

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

Rated current In (A)	Cross section area s(mm²)	Tightening torque(N.m)
6	1	M5 2.0 M4 1.2
10	1.5	
13	1.5	
16-20	2.5	
25	4	
32	6	
40	10	

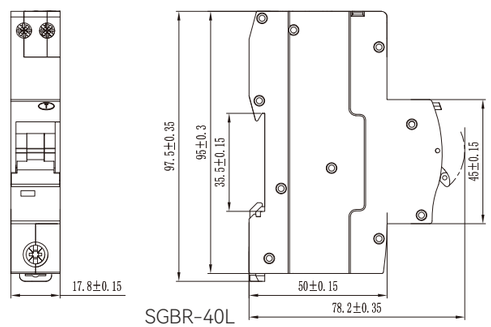
Types

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

Tripping sensitivity data

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

Overall and mounting dimensions



SGBR-40L

SGBR-32M/H Series Residual Current Circuit Breakers with Overcurrent Protection

Standard		EN/IEC 61009-1
Rated conditional short-circuit current(kA)		4.5,6
Rated current(A),In		6,10,13,16,20,25,32
Number of poles		1P+N
Rated sensitivity currents(mA),IΔn		10,30,100,300
Tripping curve		B,C
Rated residual non-operating current		0.5XIΔn
Rated impulse withstand voltage Uimp(kV)		4
Rated voltage(V)		AC 230/240
Ambient temperature (℃)		-25~+40,Max.95%humidity
Residual current off time		≤0.1s
Type of trip	Ground fault	Electronic
	Over current	Thermal-magnetic
Electrical endurance		4000
Mechanical endurance		10000
Terminal capacity		10mm² flexible/16mm² rigid
Protection degree		IP20
Installation		35mm DIN rail
Certification		TÜV Intertek CE CB

SGBR-32M

SGBR-32H

SGBR-32M Residual Current Circuit Breakers with Overcurrent Protection

	Rated current(A)	IΔn	Type AC		Type A		Packing unit
			B curve	C curve	B curve	C curve	
 Type AC	6	10mA	SGBR-32M/B6/10	SGBR-32M/C6/10	SGBR-32M/B6/10-A	SGBRi-6K/C6/10-A	
	10		SGBR-32M/B10/10	SGBR-32M/C10/10	SGBR-32M/B10/10-A	SGBRi-6K/C10/10-A	
	13		SGBR-32M/B13/10	SGBR-32M/C13/10	SGBR-32M/B13/10-A	SGBRi-6K/C13/10-A	
	16		SGBR-32M/B16/10	SGBR-32M/C16/10	SGBR-32M/B16/10-A	SGBRi-6K/C16/10-A	
	20		SGBR-32M/B20/10	SGBR-32M/C20/10	SGBR-32M/B20/10-A	SGBR-32M/C20/10-A	
	25		SGBR-32M/B25/10	SGBR-32M/C25/10	SGBR-32M/B25/10-A	SGBR-32M/C25/10-A	
	32		SGBR-32M/B32/10	SGBR-32M/C32/10	SGBR-32M/B32/10-A	SGBR-32M/C32/10-A	
	6	30mA	SGBR-32M/B6/30	SGBR-32M/C6/30	SGBR-32M/B6/30-A	SGBR-32M/C6/30-A	
	10		SGBR-32M/B10/30	SGBR-32M/C10/30	SGBR-32M/B10/30-A	SGBR-32M/C10/30-A	
	13		SGBR-32M/B13/30	SGBR-32M/C13/30	SGBR-32M/B13/30-A	SGBR-32M/C13/30-A	
	16		SGBR-32M/B16/30	SGBR-32M/C16/30	SGBR-32M/B16/30-A	SGBR-32M/C16/30-A	
	20		SGBR-32M/B20/30	SGBR-32M/C20/30	SGBR-32MB20/30-A	SGBR-32M/C20/30-A	
	25		SGBR-32M/B25/30	SGBR-32M/C25/30	SGBR-32M/B25/30-A	SGBR-32M/C25/30-A	
	32		SGBR-32M/B32/30	SGBR-32M/C32/30	SGBR-32M/B32/30-A	SGBR-32M/C32/30-A	12
 Type A	6	100mA	SGBR-32M/B6/100	SGBR-32M/C6/100	SGBR-32M/B6/100-A	SGBR-32M/C6/100-A	
	10		SGBR-32M/B10/100	SGBR-32M/C10/100	SGBR-32M/B10/100-A	SGBR-32M/C10/100-A	
	13		SGBR-32M/B13/100	SGBR-32M/C13/100	SGBR-32M/B13/100-A	SGBR-32M/C13/100-A	
	16		SGBR-32M/B16/100	SGBR-32M/C16/100	SGBR-32M/B16/100-A	SGBR-32M/C16/100-A	
	20		SGBR-32M/B20/100	SGBR-32M/C20/100	SGBR-32M/B20/100-A	SGBR-32M/C20/100-A	
	25		SGBR-32M/B25/100	SGBR-32M/C25/100	SGBR-32M/B25/100-A	SGBR-32M/C25/100-A	
	32		SGBR-32M/B32/100	SGBR-32M/C32/100	SGBR-32M/B32/100-A	SGBR-32M/C32/100-A	
	6	300mA	SGBR-32M/B6/300	SGBR-32M/C6/300	SGBR-32M/B6/300-A	SGBR-32M/C6/300-A	
	10		SGBR-32M/B10/300	SGBR-32M/C10/300	SGBR-32M/B10/300-A	SGBR-32M/C10/300-A	
	13		SGBR-32M/B13/300	SGBR-32M/C13/300	SGBR-32M/B13/300-A	SGBR-32M/C13/300-A	
	16		SGBR-32M/B16/300	SGBR-32M/C16/300	SGBR-32M/B16/300-A	SGBR-32M/C16/300-A	
	20		SGBR-32M/B20/300	SGBR-32M/C20/300	SGBR-32M/B20/300-A	SGBR-32M/C20/300-A	
	25		SGBR-32M/B25/300	SGBR-32M/C25/300	SGBR-32M/B25/300-A	SGBR-32M/C25/300-A	
	32		SGBR-32M/B32/300	SGBR-32M/C32/300	SGBR-32M/B32/300-A	SGBR-32M/C32/300-A	

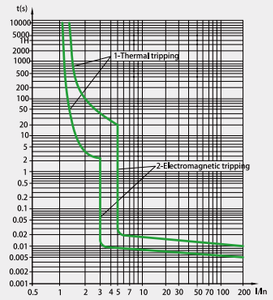
SGBR-32H Residual Current Circuit Breakers with Overcurrent Protection

	Rated current(A)	IΔn	Type AC		Type A		Packing unit
			B curve	C curve	B curve	C curve	
 Type AC	6	10mA	SGBR-32H/B6/10	SGBR-32H/C6/10	SGBR-32H/B6/10-A	SGBR-32H/C6/10-A	
	10		SGBR-32H/B10/10	SGBR-32H/C10/10	SGBR-32H/B10/10-A	SGBR-32H/C10/10-A	
	13		SGBR-32H/B13/10	SGBR-32H/C13/10	SGBR-32H/B13/10-A	SGBR-32H/C13/10-A	
	16		SGBR-32H/B16/10	SGBR-32H/C16/10	SGBR-32H/B16/10-A	SGBR-32H/C16/10-A	
	20		SGBR-32H/B20/10	SGBR-32H/C20/10	SGBR-32H/B20/10-A	SGBR-32H/C20/10-A	
	25		SGBR-32H/B25/10	SGBR-32H/C25/10	SGBR-32H/B25/10-A	SGBR-32H/C25/10-A	
	32		SGBR-32H/B32/10	SGBR-32H/C32/10	SGBR-32H/B32/10-A	SGBR-32H/C32/10-A	
	6	30mA	SGBR-32H/B6/30	SGBR-32H/C6/30	SGBR-32H/B6/30-A	SGBR-32H/C6/30-A	
	10		SGBR-32H/B10/30	SGBR-32H/C10/30	SGBR-32H/B10/30-A	SGBR-32H/C10/30-A	
	13		SGBR-32H/B13/30	SGBR-32H/C13/30	SGBR-32H/B13/30-A	SGBR-32H/C13/30-A	
	16		SGBR-32H/B16/30	SGBR-32H/C16/30	SGBR-32H/B16/30-A	SGBR-32H/C16/30-A	
	20		SGBR-32H/B20/30	SGBR-32H/C20/30	SGBR-32H/B20/30-A	SGBR-32H/C20/30-A	
	25		SGBR-32H/B25/30	SGBR-32H/C25/30	SGBR-32H/B25/30-A	SGBR-32H/C25/30-A	
	32		SGBR-32H/B32/30	SGBR-32H/C32/30	SGBR-32H/B32/30-A	SGBR-32H/C32/30-A	12
 Type A	6	100mA	SGBR-32H/B6/100	SGBR-32H/C6/100	SGBR-32H/B6/100-A	SGBR-32H/C6/100-A	
	10		SGBR-32H/B10/100	SGBR-32H/C10/100	SGBR-32H/B10/100-A	SGBR-32H/C10/100-A	
	13		SGBR-32H/B13/100	SGBR-32H/C13/100	SGBR-32H/B13/100-A	SGBR-32H/C13/100-A	
	16		SGBR-32H/B16/100	SGBR-32H/C16/100	SGBR-32H/B16/100-A	SGBR-32H/C16/100-A	
	20		SGBR-32H/B20/100	SGBR-32H/C20/100	SGBR-32H/B20/100-A	SGBR-32H/C20/100-A	
	25		SGBR-32H/B25/100	SGBR-32H/C25/100	SGBR-32H/B25/100-A	SGBR-32H/C25/100-A	
	32		SGBR-32H/B32/100	SGBR-32H/C32/100	SGBR-32H/B32/100-A	SGBR-32H/C32/100-A	
	6	300mA	SGBR-32H/B6/300	SGBR-32H/C6/300	SGBR-32H/B6/300-A	SGBR-32H/C6/300-A	
	10		SGBR-32H/B10/300	SGBR-32H/C10/300	SGBR-32H/B10/300-A	SGBR-32H/C10/300-A	
	13		SGBR-32H/B13/300	SGBR-32H/C13/300	SGBR-32H/B13/300-A	SGBR-32H/C13/300-A	
	16		SGBR-32H/B16/300	SGBR-32H/C16/300	SGBR-32H/B16/300-A	SGBR-32H/C16/300-A	
	20		SGBR-32H/B20/300	SGBR-32H/C20/300	SGBR-32H/B20/300-A	SGBR-32H/C20/300-A	
	25		SGBR-32H/B25/300	SGBR-32H/C25/300	SGBR-32H/B25/300-A	SGBR-32H/C25/300-A	
	32		SGBR-32H/B32/300	SGBR-32H/C32/300	SGBR-32H/B32/300-A	SGBR-32H/C32/300-A	

SGBR-32M/H Series Residual Current Circuit Breakers with Overcurrent Protection

Curves

B type



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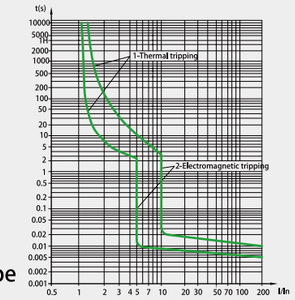


Breaking time of residual current

In(A)	I△n(A)	Max.breaking time			
		I△n	2 I△n	5 I△n	5A-500A
6-32	0.01,0.03,0.1,0.3	0.1s	0.08s	0.04s	0.04s

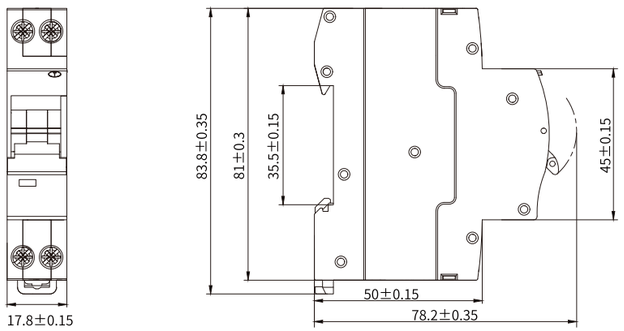
Wiring (The suitable conductors should be used for connection,see table below for relative parameters)

Rated current In (A)	Cross section area s(mm²)	Tightening torque(N.m)
6	1	1.2
10-13	1.5	
16-20	2.5	
25	4	
32	6	

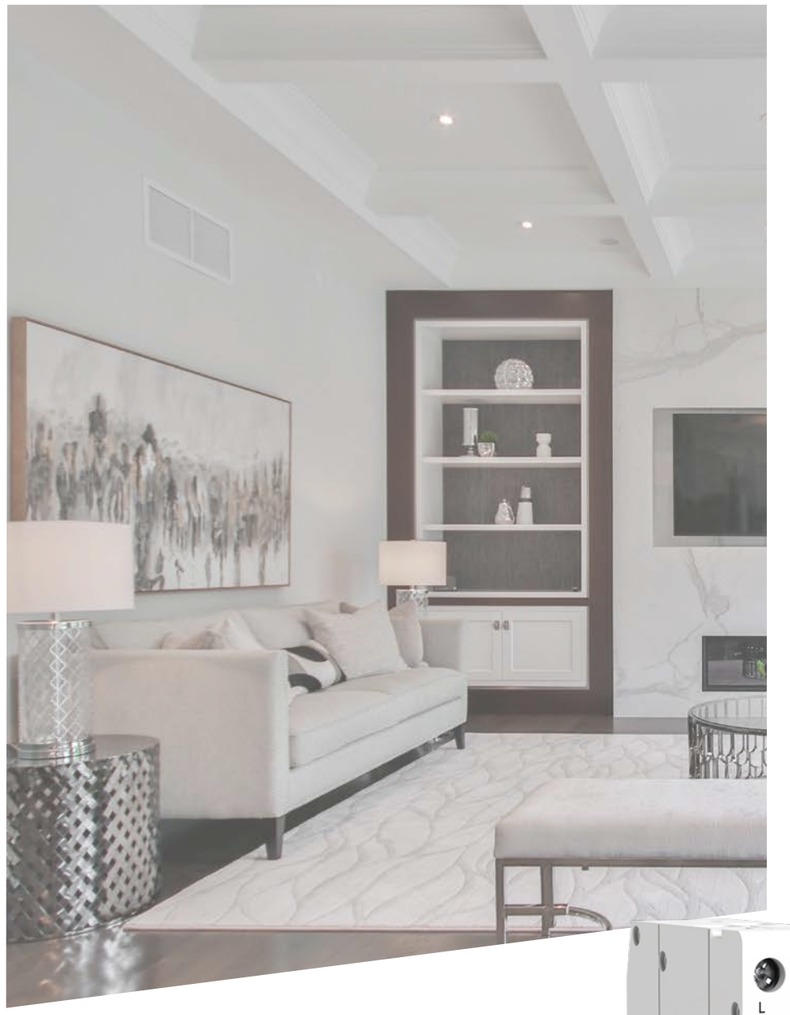
Features

Switching and isolation function.
Protection against overload and short-circuit currents.
Protection against the effects of sinusoidal alternating earth fault currents.
Protection against indirect contacts and additional protection against direct contacts.
Protection against fire hazard caused by insulation faults.
Used in residential building and distribution boards.

Overall and mounting dimensions



SGBR-32M/H



MAXGE

AFDD

- Prevents fires
- Fits in new and existing installations
- Switched neutral
- 4 in 1 protection

OVERLOAD

Test current: In:6-40A
1.13 x In No tripping within an hour
1.45 x In Tripping within an hour

ARC FAULT

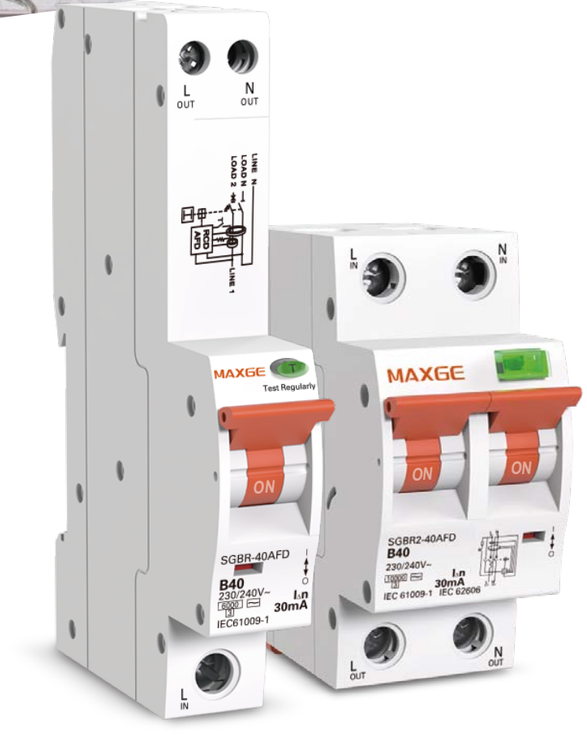
Serial Arcing Fault
Parallel Arcing Fault
Grounding Arc Fault

SHORT CIRCUIT

B,C Tripping Characteristics
B:(3-5) x In
C:(5-10) x In

EARTH LEAKAGE

I△n: 10,30,100,300mA
Type A & AC



SGBR-40AFD Series Arc Fault Detection Device

Standard		IEC/EN 62606,IEC/EN 61009-1
Rated conditional short-circuit current(kA)		6
Rated current(A),In		6,10,16,20,25,32,40
Number of poles		1P+N
Rated sensitivity currents(mA),I∆n		10,30,100,300
Tripping curve		B,C
Rated residual non-operating current		0.5XI∆n
Rated impulse withstand voltage Uimp(kV)		4
Rated voltage(V)		AC 230/240
Ambient temperature (℃)		-25~+40,Max.95%humidity
Residual current off time		≤0.1s
Type of trip	Ground fault	Electronic
	Over current	Thermal-magnetic
	Arc fault	Serial Arcing Fault,Parallel Arcing Fault,Grounding Arc Fault
	Power supply failure	Over voltage protection
Electrical endurance		2000
Mechanical endurance		10000
Terminal capacity		10mm² flexible/16mm² rigid
Protection degree		IP20
Installation		35mm DIN rail
Certification		Intertek CE CB

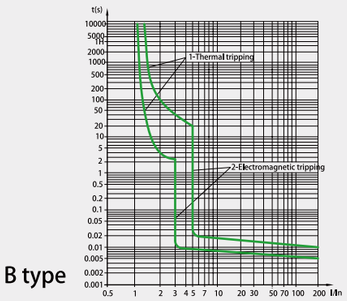
SGBR-40AFD

SGBR-40AFD Series Arc Fault Detection Device

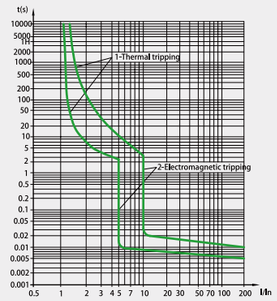
	Rated current(A)	I∆n	Type AC B curve	Type AC C curve	Type A B curve	Type A C curve	Packing unit
 Type AC	6	10mA	SGBR-40AFD-6K/B6/10	SGBR-40AFD-6K/C6/10	SGBR-40AFD-6K/B6/10-A	SGBR-40AFD-6K/C6/10-A	5
	10		SGBR-40AFD-6K/B10/10	SGBR-40AFD-6K/C10/10	SGBR-40AFD-6K/B10/10-A	SGBR-40AFD-6K/C10/10-A	
	16		SGBR-40AFD-6K/B16/10	SGBR-40AFD-6K/C16/10	SGBR-40AFD-6K/B16/10-A	SGBR-40AFD-6K/C16/10-A	
	20		SGBR-40AFD-6K/B20/10	SGBR-40AFD-6K/C20/10	SGBR-40AFD-6K/B20/10-A	SGBR-40AFD-6K/C20/10-A	
	25		SGBR-40AFD-6K/B25/10	SGBR-40AFD-6K/C25/10	SGBR-40AFD-6K/B25/10-A	SGBR-40AFD-6K/C25/10-A	
	32		SGBR-40AFD-6K/B32/10	SGBR-40AFD-6K/C32/10	SGBR-40AFD-6K/B32/10-A	SGBR-40AFD-6K/C32/10-A	
	40		SGBR-40AFD-6K/B40/10	SGBR-40AFD-6K/C40/10	SGBR-40AFD-6K/B40/10-A	SGBR-40AFD-6K/C40/10-A	
	6	30mA	SGBR-40AFD-6K/B6/30	SGBR-40AFD-6K/C6/30	SGBR-40AFD-6K/B6/30-A	SGBR-40AFD-6K/C6/30-A	
	10		SGBR-40AFD-6K/B10/30	SGBR-40AFD-6K/C10/30	SGBR-40AFD-6K/B10/30-A	SGBR-40AFD-6K/C10/30-A	
	16		SGBR-40AFD-6K/B16/30	SGBR-40AFD-6K/C16/30	SGBR-40AFD-6K/B16/30-A	SGBR-40AFD-6K/C16/30-A	
	20		SGBR-40AFD-6K/B20/30	SGBR-40AFD-6K/C20/30	SGBR-40AFD-6K/B20/30-A	SGBR-40AFD-6K/C20/30-A	
	25		SGBR-40AFD-6K/B25/30	SGBR-40AFD-6K/C25/30	SGBR-40AFD-6K/B25/30-A	SGBR-40AFD-6K/C25/30-A	
	32		SGBR-40AFD-6K/B32/30	SGBR-40AFD-6K/C32/30	SGBR-40AFD-6K/B32/30-A	SGBR-40AFD-6K/C32/30-A	
	40		SGBR-40AFD-6K/B40/30	SGBR-40AFD-6K/C40/30	SGBR-40AFD-6K/B40/30-A	SGBR-40AFD-6K/C40/30-A	
 Type A	6	100mA	SGBR-40AFD-6K/B6/100	SGBR-40AFD-6K/C6/100	SGBR-40AFD-6K/B6/100-A	SGBR-40AFD-6K/C6/100-A	
	10		SGBR-40AFD-6K/B10/100	SGBR-40AFD-6K/C10/100	SGBR-40AFD-6K/B10/100-A	SGBR-40AFD-6K/C10/100-A	
	16		SGBR-40AFD-6K/B16/100	SGBR-40AFD-6K/C16/100	SGBR-40AFD-6K/B16/100-A	SGBR-40AFD-6K/C16/100-A	
	20		SGBR-40AFD-6K/B20/100	SGBR-40AFD-6K/C20/100	SGBR-40AFD-6K/B20/100-A	SGBR-40AFD-6K/C20/100-A	
	25		SGBR-40AFD-6K/B25/100	SGBR-40AFD-6K/C25/100	SGBR-40AFD-6K/B25/100-A	SGBR-40AFD-6K/C25/100-A	
	32		SGBR-40AFD-6K/B32/100	SGBR-40AFD-6K/C32/100	SGBR-40AFD-6K/B32/100-A	SGBR-40AFD-6K/C32/100-A	
	40		SGBR-40AFD-6K/B40/100	SGBR-40AFD-6K/C40/100	SGBR-40AFD-6K/B40/100-A	SGBR-40AFD-6K/C40/100-A	
	6	300mA	SGBR-40AFD-6K/B6/300	SGBR-40AFD-6K/C6/300	SGBR-40AFD-6K/B6/300-A	SGBR-40AFD-6K/C6/300-A	
	10		SGBR-40AFD-6K/B10/300	SGBR-40AFD-6K/C10/300	SGBR-40AFD-6K/B10/300-A	SGBR-40AFD-6K/C10/300-A	
	16		SGBR-40AFD-6K/B16/300	SGBR-40AFD-6K/C16/300	SGBR-40AFD-6K/B16/300-A	SGBR-40AFD-6K/C16/300-A	
	20		SGBR-40AFD-6K/B20/300	SGBR-40AFD-6K/C20/300	SGBR-40AFD-6K/B20/300-A	SGBR-40AFD-6K/C20/300-A	
	25		SGBR-40AFD-6K/B25/300	SGBR-40AFD-6K/C25/300	SGBR-40AFD-6K/B25/300-A	SGBR-40AFD-6K/C25/300-A	
	32		SGBR-40AFD-6K/B32/300	SGBR-40AFD-6K/C32/300	SGBR-40AFD-6K/B32/300-A	SGBR-40AFD-6K/C32/300-A	
	40		SGBR-40AFD-6K/B40/300	SGBR-40AFD-6K/C40/300	SGBR-40AFD-6K/B40/300-A	SGBR-40AFD-6K/C40/300-A	

SGBR-40AFD Series Arc Fault Detection Device

Curves



B type



C type

Breaking time of residual current

Max.breaking time					
In(A)	I∆n(A)	I∆n	2 I∆n	5 I∆n	5-500A
6-40	0.01,0.03,0.1,0.3	0.1s	0.08s	0.04s	0.04s

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

Rated current In (A)	Cross section area s(mm²)	Tightening torque(N.m)
6	1	M5 2.0 M4 1.2
10	1.5	
13	1.5	
16-20	2.5	
25	4	
32	6	
40	10	

AFDD For The Consumer Unit

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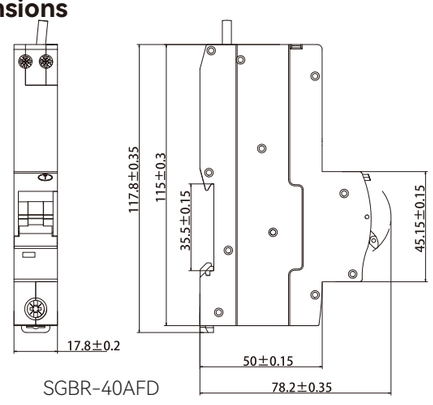
Overall and mounting dimensions



SGBR-40AFD

SGBR2-40AFD Series Arc Fault Detection Device

Standard		IEC/EN 62606,IEC/EN 61009-1
Rated conditional short-circuit current(kA)		6,10
Rated current(A),In		6,10,16,20,25,32,40
Number of poles		1P+N
Rated sensitivity currents(mA),I∆n		10,30,100,300
Tripping curve		B,C
Rated residual non-operating current		0.5XI∆n
Rated impulse withstand voltage Uimp(kV)		4
Rated voltage(V)		AC 230/240
Ambient temperature (°C)		-25~+40,Max.95%humidity
Residual current off time		≤0.1s
Type of trip	Ground fault	Electronic
	Over current	Thermal-magnetic
	Arc fault	Serial Arcing Fault,Parallel Arcing Fault,Grounding Arc Fault
	Power supply failure	Over voltage protection
Electrical endurance		2000
Mechanical endurance		10000
Terminal capacity		16mm² flexible/25mm² rigid
Protection degree		IP20
Installation		35mm DIN rail

SGBR2-40AFD

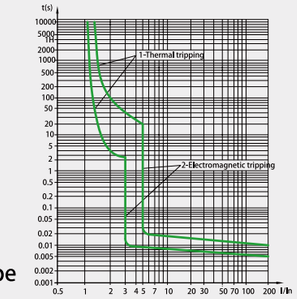
SGBR2-40AFD Series Arc Fault Detection Device

	Rated current(A)	IΔn	Type AC B curve	Type AC C curve	Type A B curve	Type A C curve	Packing unit
 Type AC	6	10mA	SGBR2-40AFD-B6/10	SGBR2-40AFD-C6/10	SGBR2-40AFD-B6/10-A	SGBR2-40AFD-C6/10-A	
	10		SGBR2-40AFD-B10/10	SGBR2-40AFD-C10/10	SGBR2-40AFD-B10/10-A	SGBR2-40AFD-C10/10-A	
	16		SGBR2-40AFD-B16/10	SGBR2-40AFD-C16/10	SGBR2-40AFD-B16/10-A	SGBR2-40AFD-C16/10-A	
	20		SGBR2-40AFD-B20/10	SGBR2-40AFD-C20/10	SGBR2-40AFD-B20/10-A	SGBR2-40AFD-C20/10-A	
	25		SGBR2-40AFD-B25/10	SGBR2-40AFD-C25/10	SGBR2-40AFD-B25/10-A	SGBR2-40AFD-C25/10-A	
	32		SGBR2-40AFD-B32/10	SGBR2-40AFD-C32/10	SGBR2-40AFD-B32/10-A	SGBR2-40AFD-C32/10-A	
	40		SGBR2-40AFD-B40/10	SGBR2-40AFD-C40/10	SGBR2-40AFD-B40/10-A	SGBR2-40AFD-C40/10-A	
	6	30mA	SGBR2-40AFD-B6/30	SGBR2-40AFD-C6/30	SGBR2-40AFD-B6/30-A	SGBR2-40AFD-C6/30-A	
	10		SGBR2-40AFD-B10/30	SGBR2-40AFD-C10/30	SGBR2-40AFD-B10/30-A	SGBR2-40AFD-C10/30-A	
	16		SGBR2-40AFD-B16/30	SGBR2-40AFD-C16/30	SGBR2-40AFD-B16/30-A	SGBR2-40AFD-C16/30-A	
	20		SGBR2-40AFD-B20/30	SGBR2-40AFD-C20/30	SGBR2-40AFD-B20/30-A	SGBR2-40AFD-C20/30-A	
	25		SGBR2-40AFD-B25/30	SGBR2-40AFD-C25/30	SGBR2-40AFD-B25/30-A	SGBR2-40AFD-C25/30-A	
	32		SGBR2-40AFD-B32/30	SGBR2-40AFD-C32/30	SGBR2-40AFD-B32/30-A	SGBR2-40AFD-C32/30-A	
	40		SGBR2-40AFD-B40/30	SGBR2-40AFD-C40/30	SGBR2-40AFD-B40/30-A	SGBR2-40AFD-C40/30-A	
 Type A	6	100mA	SGBR2-40AFD-B6/100	SGBR2-40AFD-C6/100	SGBR2-40AFD-B6/100-A	SGBR2-40AFD-C6/100-A	6
	10		SGBR2-40AFD-B10/100	SGBR2-40AFD-C10/100	SGBR2-40AFD-B10/100-A	SGBR2-40AFD-C10/100-A	
	16		SGBR2-40AFD-B16/100	SGBR2-40AFD-C16/100	SGBR2-40AFD-B16/100-A	SGBR2-40AFD-C16/100-A	
	20		SGBR2-40AFD-B20/100	SGBR2-40AFD-C20/100	SGBR2-40AFD-B20/100-A	SGBR2-40AFD-C20/100-A	
	25		SGBR2-40AFD-B25/100	SGBR2-40AFD-C25/100	SGBR2-40AFD-B25/100-A	SGBR2-40AFD-C25/100-A	
	32		SGBR2-40AFD-B32/100	SGBR2-40AFD-C32/100	SGBR2-40AFD-B32/100-A	SGBR2-40AFD-C32/100-A	
	40		SGBR2-40AFD-B40/100	SGBR2-40AFD-C40/100	SGBR2-40AFD-B40/100-A	SGBR2-40AFD-C40/100-A	
	6	300mA	SGBR2-40AFD-B6/300	SGBR2-40AFD-C6/300	SGBR2-40AFD-B6/300-A	SGBR2-40AFD-C6/300-A	
	10		SGBR2-40AFD-B10/300	SGBR2-40AFD-C10/300	SGBR2-40AFD-B10/300-A	SGBR2-40AFD-C10/300-A	
	16		SGBR2-40AFD-B16/300	SGBR2-40AFD-C16/300	SGBR2-40AFD-B16/300-A	SGBR2-40AFD-C16/300-A	
	20		SGBR2-40AFD-B20/300	SGBR2-40AFD-C20/300	SGBR2-40AFD-B20/300-A	SGBR2-40AFD-C20/300-A	
	25		SGBR2-40AFD-B25/300	SGBR2-40AFD-C25/300	SGBR2-40AFD-B25/300-A	SGBR2-40AFD-C25/300-A	
	32		SGBR2-40AFD-B32/300	SGBR2-40AFD-C32/300	SGBR2-40AFD-B32/300-A	SGBR2-40AFD-C32/300-A	
	40		SGBR2-40AFD-B40/300	SGBR2-40AFD-C40/300	SGBR2-40AFD-B40/300-A	SGBR2-40AFD-C40/300-A	

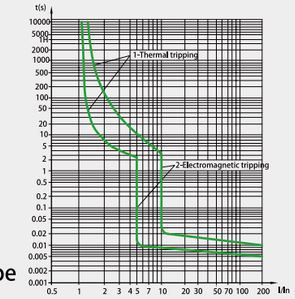
SGBR2-40AFD Series Arc Fault Detection Device

Curves

B type



C type



Breaking time of residual current

Max.breaking time					
In(A)	IΔn(A)	IΔn	2 IΔn	5 IΔn	5-500A
6-40	0.01,0.03,0.1,0.3	0.1s	0.08s	0.04s	0.04s

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

Rated current In (A)	Cross section area s(mm²)	Tightening torque(N.m)
6	1	2.0
10	1.5	
13	1.5	
16-20	2.5	
25	4	
32	6	
40	10	

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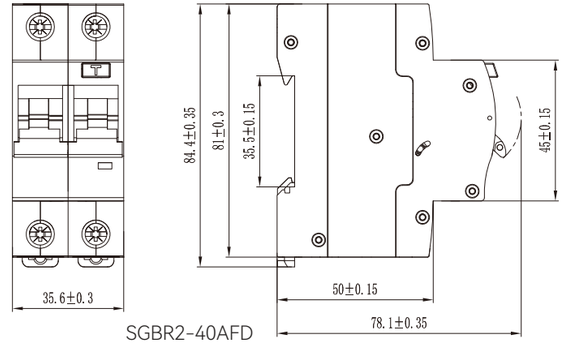
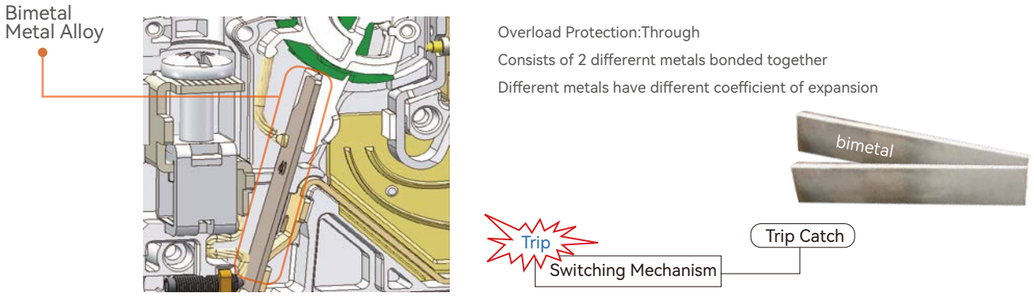
Overall and mounting dimensions



SGBR2-40AFD

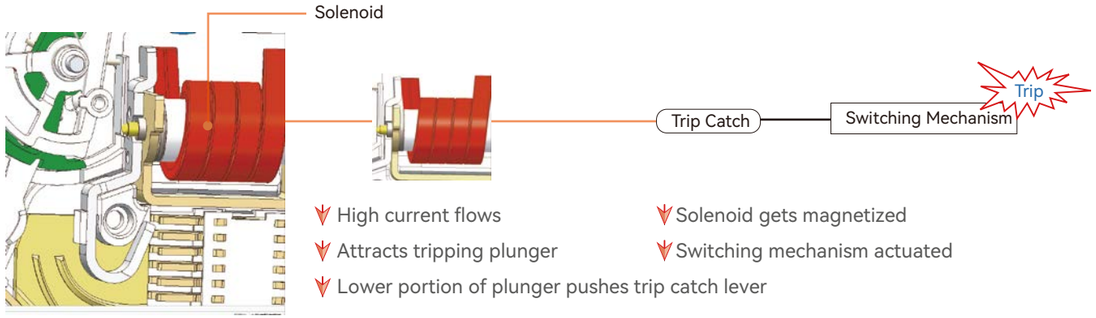
SGBR2-40AFD Series　　Arc Fault Detection Device

Overload Operation



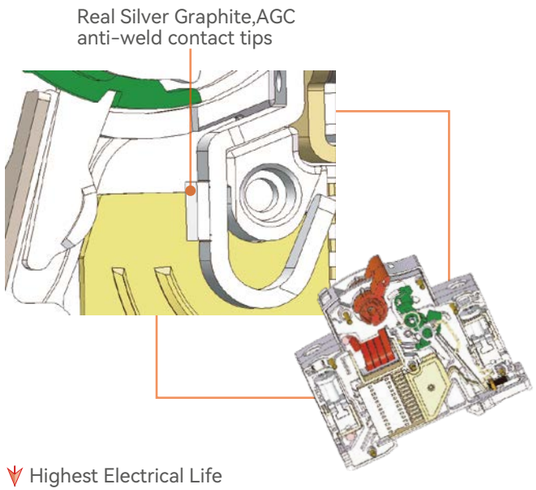
- On heating-it bends towards tripping
- Pushes the trip catch lever
- Switching mechanism actuated

Short Circuit Operation



- High current flows
- Attracts tripping plunger
- Lower portion of plunger pushes trip catch lever
- Solenoid gets magnetized
- Switching mechanism actuated

Features & Benefits



- Highest Electrical Life
- Maximum Safety against Contact welding
- Rare possibility of AFDD replacement
- Quick & Efficient Arc Quenching
- Very low let through energy,class 3
- Increases life of Installation & equipment

MCB SERIES

Miniature Circuit Breaker

Products Overview of Circuit Breakers

Product name	MCB				
Product range	SGB-63Me	SGB-63Ne	SGB-63Se	SGB-63M	SGB-63H
Product picture					
Standard	IEC/EN 60898-1 GB/T 10963.1				
Number of poles	1P,2P,3P,4P,(1P+N),(3P+N)				
Electrical characteristics					
Rated current(A) In	1-63				
Rated voltage(V)	1P AC 230/400;240/415 1P+N AC 230/240 2P AC 230/400;240/415 3P,3P+N,4P AC 400/415				
AC rated short-circuit capacity(kA)					
IEC60898-1 standard(kA)	6	4.5	3	6	10
Tripping curve	B,C			B,C,D	
Type	AC				
Electrical auxiliaries	-			Auxilary contact,Alarm contact,Shunt trip, Over/under voltage trip	
Catalogue page NO.	67-70			71-76	

Products Overview of Circuit Breakers

Product name	DC MCB	DPN MCB	HR MCB	ISOLATING SWITCH
Product range	SGB-63M-DC	SG-DPN	SGB-125L/M/H	SGI-R
Product picture				
Standard	GB/T 14048.2 IEC/EN 60947-2	GB/T 10963.1 IEC/EN 60898-1	IEC/EN 60898-1 IEC/EN 60947-2	GB/T 14048.3 IEC/EN 60947-3
Number of poles	1P,2P,3P,4P	1P+N	1P,2P,3P,4P	1P,2P,3P,4P
Electrical characteristics				
Rated current(A) In	1-63	2-32	40-125	16-125
Rated voltage(V)	DC 120,240	AC 240	AC 240,415	AC 240,415
AC rated short-circuit capacity(kA)				
Breaking capacity (Icn/Icu)kA	6	3 / 4.5 / 6	IEC-60898-1: 6 IEC-60947-2: 15	-
Tripping curve	8-12In	B,C	B,C,D / 8-12In	-
Type	DC	AC		
Electrical auxiliaries	-	Auxilary contact Alarm contact Shunt trip Over/under voltage trip	-	
Catalogue page NO.	77-80	81-83	84-87	88-90

SGB-63Me/Ne/Se Series　Miniature Circuit Breaker

Standard	EN/IEC 60898-1 GB/T 10963.1
Breaking capacity(kA)	3,4.5,6
Protection	Against overload and short circuit
Rated current(A) In	1,2,3,4,6,10,13,16,20,25,32,40,50,63
Rated voltage(V)	1P AC 230/400,240/415;1P+N AC 230/240
	2P AC 230/400,240/415;3P,3P+N,4P AC 230/240
Rated impulse withstand voltage Uimp(kV)	4
Rated insulation voltage Ui(V)	500
Energy limiting class	3
Ambient temperature (℃)	-25~+40,Max.95%humidity
Thermal operating limit	1.13 xIn No tripping within an hour
	1.45 xIn Tripping within an hour
Magnertic operating	B:(3-5)xIn,C:(5-10)xIn
Number of poles	1P,1P+N,2P,3P,3P+N and 4P
Type of trip	Thermal/ magnetic release
Terminal capacity	16mm² flexible or 25mm² rigid
Protection degree	IP20
Installation	Mounting on 35mm DIN rail
Width	17.8mm per pole
Certification	INMETRO CE CB

SGB-63Me-1P　SGB-63Me-2P　SGB-63Me-3P　SGB-63Me-4P

SGB-63Me/Ne/Se Series　Miniature Circuit Breaker

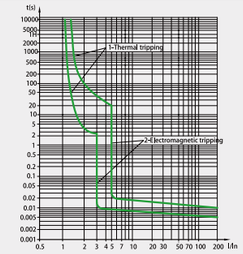
	Rated current(A)	C curve			Packing unit
		6 kA	4.5 kA	3 kA	
 SGB-63Me-1P	1	SGB-63Me/1-C1	SGB-63Ne/1-C1	SGB-63Se/1-C1	12
	2	SGB-63Me/1-C2	SGB-63Ne/1-C2	SGB-63Se/1-C2	
	3	SGB-63Me/1-C3	SGB-63Ne/1-C3	SGB-63Se/1-C3	
	4	SGB-63Me/1-C4	SGB-63Ne/1-C4	SGB-63Se/1-C4	
	6	SGB-63Me/1-C6	SGB-63Ne/1-C6	SGB-63Se/1-C6	
	10	SGB-63Me/1-C10	SGB-63Ne/1-C10	SGB-63Se/1-C10	
	13	SGB-63Me/1-C13	SGB-63Ne/1-C13	SGB-63Se/1-C13	
	16	SGB-63Me/1-C16	SGB-63Ne/1-C16	SGB-63Se/1-C16	
	20	SGB-63Me/1-C20	SGB-63Ne/1-C20	SGB-63Se/1-C20	
	25	SGB-63Me/1-C25	SGB-63Ne/1-C25	SGB-63Se/1-C25	
	32	SGB-63Me/1-C32	SGB-63Ne/1-C32	SGB-63Se/1-C32	
	40	SGB-63Me/1-C40	SGB-63Ne/1-C40	SGB-63Se/1-C40	
	50	SGB-63Me/1-C50	SGB-63Ne/1-C50	SGB-63Se/1-C50	
	63	SGB-63Me/1-C63	SGB-63Ne/1-C63	SGB-63Se/1-C63	
 SGB-63Me-1P+N	1	SGB-63Me/1-C1N	SGB-63Ne/1-C1N	SGB-63Se/1-C1N	6
	2	SGB-63Me/1-C2N	SGB-63Ne/1-C2N	SGB-63Se/1-C2N	
	3	SGB-63Me/1-C3N	SGB-63Ne/1-C3N	SGB-63Se/1-C3N	
	4	SGB-63Me/1-C4N	SGB-63Ne/1-C4N	SGB-63Se/1-C4N	
	6	SGB-63Me/1-C6N	SGB-63Ne/1-C6N	SGB-63Se/1-C6N	
	10	SGB-63Me/1-C10N	SGB-63Ne/1-C10N	SGB-63Se/1-C10N	
	13	SGB-63Me/1-C13N	SGB-63Ne/1-C13N	SGB-63Se/1-C13N	
	16	SGB-63Me/1-C16N	SGB-63Ne/1-C16N	SGB-63Se/1-C16N	
	20	SGB-63Me/1-C20N	SGB-63Ne/1-C20N	SGB-63Se/1-C20N	
	25	SGB-63Me/1-C25N	SGB-63Ne/1-C25N	SGB-63Se/1-C25N	
	32	SGB-63Me/1-C32N	SGB-63Ne/1-C32N	SGB-63Se/1-C32N	
	40	SGB-63Me/1-C40N	SGB-63Ne/1-C40N	SGB-63Se/1-C40N	
	50	SGB-63Me/1-C50N	SGB-63Ne/1-C50N	SGB-63Se/1-C50N	
	63	SGB-63Me/1-C63N	SGB-63Ne/1-C63N	SGB-63Se/1-C63N	
 SGB-63Me-2P	1	SGB-63Me/2-C1	SGB-63Ne/2-C1	SGB-63Se/2-C1	6
	2	SGB-63Me/2-C2	SGB-63Ne/2-C2	SGB-63Se/2-C2	
	3	SGB-63Me/2-C3	SGB-63Ne/2-C3	SGB-63Se/2-C3	
	4	SGB-63Me/2-C4	SGB-63Ne/2-C4	SGB-63Se/2-C4	
	6	SGB-63Me/2-C6	SGB-63Ne/2-C6	SGB-63Se/2-C6	
	10	SGB-63Me/2-C10	SGB-63Ne/2-C10	SGB-63Se/2-C10	
	13	SGB-63Me/2-C13	SGB-63Ne/2-C13	SGB-63Se/2-C13	
	16	SGB-63Me/2-C16	SGB-63Ne/2-C16	SGB-63Se/2-C16	
	20	SGB-63Me/2-C20	SGB-63Ne/2-C20	SGB-63Se/2-C20	
	25	SGB-63Me/2-C25	SGB-63Ne/2-C25	SGB-63Se/2-C25	
	32	SGB-63Me/2-C32	SGB-63Ne/2-C32	SGB-63Se/2-C32	
	40	SGB-63Me/2-C40	SGB-63Ne/2-C40	SGB-63Se/2-C40	
	50	SGB-63Me/2-C50	SGB-63Ne/2-C50	SGB-63Se/2-C50	
	63	SGB-63Me/2-C63	SGB-63Ne/2-C63	SGB-63Se/2-C63	

SGB-63Me/Ne/Se Series Miniature Circuit Breaker

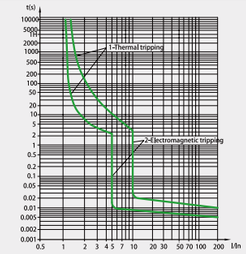
	Rated current(A)	C curve			Packing unit
		6 kA	4.5 kA	3 kA	
 SGB-63Me-3P	1	SGB-63Me/3-C1	SGB-63Ne/3-C1	SGB-63Se/3-C1	4
	2	SGB-63Me/3-C2	SGB-63Ne/3-C2	SGB-63Se/3-C2	
	3	SGB-63Me/3-C3	SGB-63Ne/3-C3	SGB-63Se/3-C3	
	4	SGB-63Me/3-C4	SGB-63Ne/3-C4	SGB-63Se/3-C4	
	6	SGB-63Me/3-C6	SGB-63Ne/3-C6	SGB-63Se/3-C6	
	10	SGB-63Me/3-C10	SGB-63Ne/3-C10	SGB-63Se/3-C10	
	13	SGB-63Me/3-C13	SGB-63Ne/3-C13	SGB-63Se/3-C13	
	16	SGB-63Me/3-C16	SGB-63Ne/3-C16	SGB-63Se/3-C16	
	20	SGB-63Me/3-C20	SGB-63Ne/3-C20	SGB-63Se/3-C20	
	25	SGB-63Me/3-C25	SGB-63Ne/3-C25	SGB-63Se/3-C25	
	32	SGB-63Me/3-C32	SGB-63Ne/3-C32	SGB-63Se/3-C32	
	40	SGB-63Me/3-C40	SGB-63Ne/3-C40	SGB-63Se/3-C40	
	50	SGB-63Me/3-C50	SGB-63Ne/3-C50	SGB-63Se/3-C50	
	63	SGB-63Me/3-C63	SGB-63Ne/3-C63	SGB-63Se/3-C63	
 SGB-63Me-3P+N	1	SGB-63Me/3-C1N	SGB-63Ne/3-C1N	SGB-63Se/3-C1N	3
	2	SGB-63Me/3-C2N	SGB-63Ne/3-C2N	SGB-63Se/3-C2N	
	3	SGB-63Me/3-C3N	SGB-63Ne/3-C3N	SGB-63Se/3-C3N	
	4	SGB-63Me/3-C4N	SGB-63Ne/3-C4N	SGB-63Se/3-C4N	
	6	SGB-63Me/3-C6N	SGB-63Ne/3-C6N	SGB-63Se/3-C6N	
	10	SGB-63Me/3-C10N	SGB-63Ne/3-C10N	SGB-63Se/3-C10N	
	13	SGB-63Me/3-C13N	SGB-63Ne/3-C13N	SGB-63Se/3-C13N	
	16	SGB-63Me/3-C16N	SGB-63Ne/3-C16N	SGB-63Se/3-C16N	
	20	SGB-63Me/3-C20N	SGB-63Ne/3-C20N	SGB-63Se/3-C20N	
	25	SGB-63Me/3-C25N	SGB-63Ne/3-C25N	SGB-63Se/3-C25N	
	32	SGB-63Me/3-C32N	SGB-63Ne/3-C32N	SGB-63Se/3-C32N	
	40	SGB-63Me/3-C40N	SGB-63Ne/3-C40N	SGB-63Se/3-C40N	
	50	SGB-63Me/3-C50N	SGB-63Ne/3-C50N	SGB-63Se/3-C50N	
	63	SGB-63Me/3-C63N	SGB-63Ne/3-C63N	SGB-63Se/3-C63N	
 SGB-63Me-4P	1	SGB-63Me/4-C1	SGB-63Ne/4-C1	SGB-63Se/4-C1	3
	2	SGB-63Me/4-C2	SGB-63Ne/4-C2	SGB-63Se/4-C2	
	3	SGB-63Me/4-C3	SGB-63Ne/4-C3	SGB-63Se/4-C3	
	4	SGB-63Me/4-C4	SGB-63Ne/4-C4	SGB-63Se/4-C4	
	6	SGB-63Me/4-C6	SGB-63Ne/4-C6	SGB-63Se/4-C6	
	10	SGB-63Me/4-C10	SGB-63Ne/4-C10	SGB-63Se/4-C10	
	13	SGB-63Me/4-C13	SGB-63Ne/4-C13	SGB-63Se/4-C13	
	16	SGB-63Me/4-C16	SGB-63Ne/4-C16	SGB-63Se/4-C16	
	20	SGB-63Me/4-C20	SGB-63Ne/4-C20	SGB-63Se/4-C20	
	25	SGB-63Me/4-C25	SGB-63Ne/4-C25	SGB-63Se/4-C25	
	32	SGB-63Me/4-C32	SGB-63Ne/4-C32	SGB-63Se/4-C32	
	40	SGB-63Me/4-C40	SGB-63Ne/4-C40	SGB-63Se/4-C40	
	50	SGB-63Me/4-C50	SGB-63Ne/4-C50	SGB-63Se/4-C50	
	63	SGB-63Me/4-C63	SGB-63Ne/4-C63	SGB-63Se/4-C63	

SGB-63Me/Ne/Se Series Miniature Circuit Breaker

Curves



B type



C type

Overcurrent protecting characteristics

NO.	Rated current of release(A)	Initial state	Test current	Specified time	Result to be obtained	Remarks
1	1-63	cold state	1.13In	t≤1h	Non-trip	
2	1-63	upon the previous test	1.45In	t<1h	trip	Setting current up to specified value steadily in 5s
3	In≤32 In>32	cold state	2.55In	1s<t<60s 1s<t<120s	trip	
4	1-63	cold state	3In 5In	t≤0.1s t<0.1s	Non-trip trip	B type
			5In 10In	t≤0.1s t<0.1s	Non-trip trip	C type

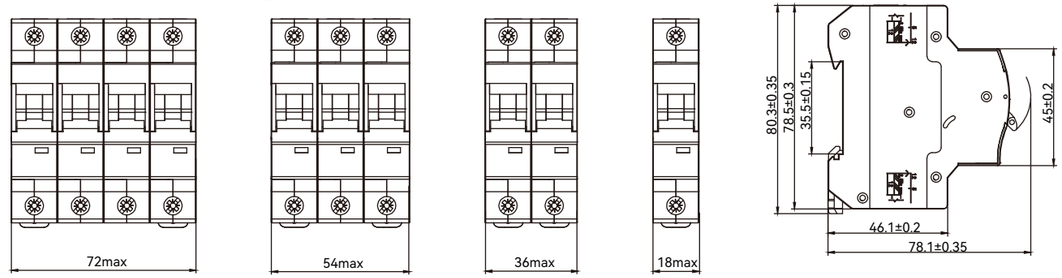
Endurance(operations)

Category	Operations	Operation frequency	Rated current
Electrical endurance	4000	240/h	1-32
		120/h	40-63
Mechanical endurance	10000	240/h	1-63

Features

Much higher short circuit breaking capacity, Dual-connection convenient for both standard busbar and conductor connection. Improved safety of operators offered by special design from terminals. Much longer service life thanks to energy-storage operating mechanism.Enclosure and functional parts made from imported plastics with flame-retardant, heat-resistant, and impulse-proof properties.Higher current-limiting capacity ensuring a cost-effective range of products. Different handle color for different rated current with contactor condition indicator.

Overall and mounting dimensions



SGB-63Me/SGB-63Se/SGB-63Ne

SGB-63M/H Series　Miniature Circuit Breaker

Standard	EN/IEC 60898-1 GB/T 10963.1
Breaking capacity(kA)	6,10
Protection	Against overload and short circuit
Rated current(A) In	1,2,4,6,10,16,20,25,32,40,50,63
Rated voltage(V)	1P AC 230/400,240/415
	1P+N,2P,3P,3P+N,4P AC 230/400,240/415
Rated impulse withstand voltage Uimp(kV)	4
Rated insulation voltage Ui(V)	500
Energy limiting class	3
Ambient temperature (℃)	-25~+40,Max.95%humidity
Thermal operating limit	1.13 xIn No tripping within an hour
	1.45 xIn Tripping within an hour
Magnertic operating	B:(3-5)xIn,C:(5-10)xIn,D:(10-20)xIn
Number of poles	1P,1P+N,2P,3P,3P+N and 4P
Type of trip	Thermal/ magnetic release
Terminal capacity	16mm² flexible or 25mm² rigid
Protection degree	IP20
Installation	Mounting on 35mm DIN rail
Width	17.8mm per pole
Certification	VDE KEMA EUR CE CB


SGB-63M-1P


SGB-63M-2P


SGB-63M-3P


SGB-63M-4P

SGB-63M Series　Miniature Circuit Breaker

	Rated current(A)	B curve	C curve	D curve	Packing unit
 SGB-63M-1P	1	SGB-63M/1-B1	SGB-63M/1-C1	SGB-63M/1-D1	12
	2	SGB-63M/1-B2	SGB-63M/1-C2	SGB-63M/1-D2	
	3	SGB-63M/1-B3	SGB-63M/1-C3	SGB-63M/1-D3	
	4	SGB-63M/1-B4	SGB-63M/1-C4	SGB-63M/1-D4	
	6	SGB-63M/1-B6	SGB-63M/1-C6	SGB-63M/1-D6	
	10	SGB-63M/1-B10	SGB-63M/1-C10	SGB-63M/1-D10	
	13	SGB-63M/1-B13	SGB-63M/1-C13	SGB-63M/1-D13	
	16	SGB-63M/1-B16	SGB-63M/1-C16	SGB-63M/1-D16	
	20	SGB-63M/1-B20	SGB-63M/1-C20	SGB-63M/1-D20	
	25	SGB-63M/1-B25	SGB-63M/1-C25	SGB-63M/1-D25	
	32	SGB-63M/1-B32	SGB-63M/1-C32	SGB-63M/1-D32	
	40	SGB-63M/1-B40	SGB-63M/1-C40	SGB-63M/1-D40	
	50	SGB-63M/1-B50	SGB-63M/1-C50	SGB-63M/1-D50	
	63	SGB-63M/1-B63	SGB-63M/1-C63	SGB-63M/1-D63	
 SGB-63M-1P+N	1	SGB-63M/1-B1N	SGB-63M/1-C1N	SGB-63M/1-D1N	6
	2	SGB-63M/1-B2N	SGB-63M/1-C2N	SGB-63M/1-D2N	
	3	SGB-63M/1-B3N	SGB-63M/1-C3N	SGB-63M/1-D3N	
	4	SGB-63M/1-B4N	SGB-63M/1-C4N	SGB-63M/1-D4N	
	6	SGB-63M/1-B6N	SGB-63M/1-C6N	SGB-63M/1-D6N	
	10	SGB-63M/1-B10N	SGB-63M/1-C10N	SGB-63M/1-D10N	
	13	SGB-63M/1-B13N	SGB-63M/1-C13N	SGB-63M/1-D13N	
	16	SGB-63M/1-B16N	SGB-63M/1-C16N	SGB-63M/1-D16N	
	20	SGB-63M/1-B20N	SGB-63M/1-C20N	SGB-63M/1-D20N	
	25	SGB-63M/1-B25N	SGB-63M/1-C25N	SGB-63M/1-D25N	
	32	SGB-63M/1-B32N	SGB-63M/1-C32N	SGB-63M/1-D32N	
	40	SGB-63M/1-B40N	SGB-63M/1-C40N	SGB-63M/1-D40N	
	50	SGB-63M/1-B50N	SGB-63M/1-C50N	SGB-63M/1-D50N	
	63	SGB-63M/1-B63N	SGB-63M/1-C63N	SGB-63M/1-D63N	
 SGB-63M-2P	1	SGB-63M/2-B1	SGB-63M/2-C1	SGB-63M/2-D1	6
	2	SGB-63M/2-B2	SGB-63M/2-C2	SGB-63M/2-D2	
	3	SGB-63M/2-B3	SGB-63M/2-C3	SGB-63M/2-D3	
	4	SGB-63M/2-B4	SGB-63M/2-C4	SGB-63M/2-D4	
	6	SGB-63M/2-B6	SGB-63M/2-C6	SGB-63M/2-D6	
	10	SGB-63M/2-B10	SGB-63M/2-C10	SGB-63M/2-D10	
	13	SGB-63M/2-B13	SGB-63M/2-C13	SGB-63M/2-D13	
	16	SGB-63M/2-B16	SGB-63M/2-C16	SGB-63M/2-D16	
	20	SGB-63M/2-B20	SGB-63M/2-C20	SGB-63M/2-D20	
	25	SGB-63M/2-B25	SGB-63M/2-C25	SGB-63M/2-D25	
	32	SGB-63M/2-B32	SGB-63M/2-C32	SGB-63M/2-D32	
	40	SGB-63M/2-B40	SGB-63M/2-C40	SGB-63M/2-D40	
	50	SGB-63M/2-B50	SGB-63M/2-C50	SGB-63M/2-D50	
	63	SGB-63M/2-B63	SGB-63M/2-C63	SGB-63M/2-D63	

SGB-63M Series Miniature Circuit Breaker

	Rated current(A)	B curve	C curve	D curve	Packing unit
 SGB-63M-3P	1	SGB-63M/3-B1	SGB-63M/3-C1	SGB-63M/1-D1	4
	2	SGB-63M/3-B2	SGB-63M/3-C2	SGB-63M/1-D2	
	3	SGB-63M/3-B3	SGB-63M/3-C3	SGB-63M/1-D3	
	4	SGB-63M/3-B4	SGB-63M/3-C4	SGB-63M/1-D4	
	6	SGB-63M/3-B6	SGB-63M/3-C6	SGB-63M/1-D6	
	10	SGB-63M/3-B10	SGB-63M/3-C10	SGB-63M/1-D10	
	13	SGB-63M/3-B13	SGB-63M/3-C13	SGB-63M/1-D13	
	16	SGB-63M/3-B16	SGB-63M/3-C16	SGB-63M/1-D16	
	20	SGB-63M/3-B20	SGB-63M/3-C20	SGB-63M/1-D20	
	25	SGB-63M/3-B25	SGB-63M/3-C25	SGB-63M/1-D25	
	32	SGB-63M/3-B32	SGB-63M/3-C32	SGB-63M/1-D32	
	40	SGB-63M/3-B40	SGB-63M/3-C40	SGB-63M/1-D40	
	50	SGB-63M/3-B50	SGB-63M/3-C50	SGB-63M/1-D50	
	63	SGB-63M/3-B63	SGB-63M/3-C63	SGB-63M/1-D63	
 SGB-63M-3P+N	1	SGB-63M/3-B1N	SGB-63M/3-C1N	SGB-63M/3-D1N	3
	2	SGB-63M/3-B2N	SGB-63M/3-C2N	SGB-63M/3-D2N	
	3	SGB-63M/3-B3N	SGB-63M/3-C3N	SGB-63M/3-D3N	
	4	SGB-63M/3-B4N	SGB-63M/3-C4N	SGB-63M/3-D4N	
	6	SGB-63M/3-B6N	SGB-63M/3-C6N	SGB-63M/3-D6N	
	10	SGB-63M/3-B10N	SGB-63M/3-C10N	SGB-63M/3-D10N	
	13	SGB-63M/3-B13N	SGB-63M/3-C13N	SGB-63M/3-D13N	
	16	SGB-63M/3-B16N	SGB-63M/3-C16N	SGB-63M/3-D16N	
	20	SGB-63M/3-B20N	SGB-63M/3-C20N	SGB-63M/3-D20N	
	25	SGB-63M/3-B25N	SGB-63M/3-C25N	SGB-63M/3-D25N	
	32	SGB-63M/3-B32N	SGB-63M/3-C32N	SGB-63M/3-D32N	
	40	SGB-63M/3-B40N	SGB-63M/3-C40N	SGB-63M/3-D40N	
	50	SGB-63M/3-B50N	SGB-63M/3-C50N	SGB-63M/3-D50N	
	63	SGB-63M/3-B63N	SGB-63M/3-C63N	SGB-63M/3-D63N	
 SGB-63M-4P	1	SGB-63M/4-B1	SGB-63M/4-C1	SGB-63M/4-D1	3
	2	SGB-63M/4-B2	SGB-63M/4-C2	SGB-63M/4-D2	
	3	SGB-63M/4-B3	SGB-63M/4-C3	SGB-63M/4-D3	
	4	SGB-63M/4-B4	SGB-63M/4-C4	SGB-63M/4-D4	
	6	SGB-63M/4-B6	SGB-63M/4-C6	SGB-63M/4-D6	
	10	SGB-63M/4-B10	SGB-63M/4-C10	SGB-63M/4-D10	
	13	SGB-63M/4-B13	SGB-63M/4-C13	SGB-63M/4-D13	
	16	SGB-63M/4-B16	SGB-63M/4-C16	SGB-63M/4-D16	
	20	SGB-63M/4-B20	SGB-63M/4-C20	SGB-63M/4-D20	
	25	SGB-63M/4-B25	SGB-63M/4-C25	SGB-63M/4-D25	
	32	SGB-63M/4-B32	SGB-63M/4-C32	SGB-63M/4-D32	
	40	SGB-63M/4-B40	SGB-63M/4-C40	SGB-63M/4-D40	
	50	SGB-63M/4-B50	SGB-63M/4-C50	SGB-63M/4-D50	
	63	SGB-63M/4-B63	SGB-63M/4-C63	SGB-63M/4-D63	

SGB-63H Series Miniature Circuit Breaker

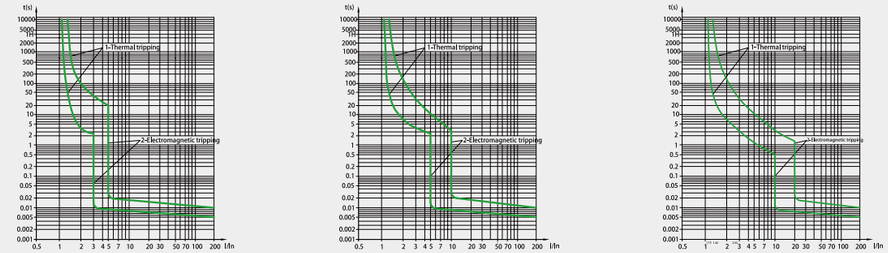
	Rated current(A)	B curve	C curve	D curve	Packing unit
 SGB-63H-1P	1	SGB-63H/1-B1	SGB-63H/1-C1	SGB-63H/1-D1	12
	2	SGB-63H/1-B2	SGB-63H/1-C2	SGB-63H/1-D2	
	3	SGB-63H/1-B3	SGB-63H/1-C3	SGB-63H/1-D3	
	4	SGB-63H/1-B4	SGB-63H/1-C4	SGB-63H/1-D4	
	6	SGB-63H/1-B6	SGB-63H/1-C6	SGB-63H/1-D6	
	10	SGB-63H/1-B10	SGB-63H/1-C10	SGB-63H/1-D10	
	13	SGB-63H/1-B13	SGB-63H/1-C13	SGB-63H/1-D13	
	16	SGB-63H/1-B16	SGB-63H/1-C16	SGB-63H/1-D16	
	20	SGB-63H/1-B20	SGB-63H/1-C20	SGB-63H/1-D20	
	25	SGB-63H/1-B25	SGB-63H/1-C25	SGB-63H/1-D25	
	32	SGB-63H/1-B32	SGB-63H/1-C32	SGB-63H/1-D32	
	40	SGB-63H/1-B40	SGB-63H/1-C40	SGB-63H/1-D40	
	50	SGB-63H/1-B50	SGB-63H/1-C50	SGB-63H/1-D50	
	63	SGB-63H/1-B63	SGB-63H/1-C63	SGB-63H/1-D63	
 SGB-63H-1P+N	1	SGB-63H/1-B1N	SGB-63H/1-C1N	SGB-63H/1-D1N	6
	2	SGB-63H/1-B2N	SGB-63H/1-C2N	SGB-63H/1-D2N	
	3	SGB-63H/1-B3N	SGB-63H/1-C3N	SGB-63H/1-D3N	
	4	SGB-63H/1-B4N	SGB-63H/1-C4N	SGB-63H/1-D4N	
	6	SGB-63H/1-B6N	SGB-63H/1-C6N	SGB-63H/1-D6N	
	10	SGB-63H/1-B10N	SGB-63H/1-C10N	SGB-63H/1-D10N	
	13	SGB-63H/1-B13N	SGB-63H/1-C13N	SGB-63H/1-D13N	
	16	SGB-63H/1-B16N	SGB-63H/1-C16N	SGB-63H/1-D16N	
	20	SGB-63H/1-B20N	SGB-63H/1-C20N	SGB-63H/1-D20N	
	25	SGB-63H/1-B25N	SGB-63H/1-C25N	SGB-63H/1-D25N	
	32	SGB-63H/1-B32N	SGB-63H/1-C32N	SGB-63H/1-D32N	
	40	SGB-63H/1-B40N	SGB-63H/1-C40N	SGB-63H/1-D40N	
	50	SGB-63H/1-B50N	SGB-63H/1-C50N	SGB-63H/1-D50N	
	63	SGB-63H/1-B63N	SGB-63H/1-C63N	SGB-63H/1-D63N	
 SGB-63H-2P	1	SGB-63H/2-B1	SGB-63H/2-C1	SGB-63H/2-D1	6
	2	SGB-63H/2-B2	SGB-63H/2-C2	SGB-63H/2-D2	
	3	SGB-63H/2-B3	SGB-63H/2-C3	SGB-63H/2-D3	
	4	SGB-63H/2-B4	SGB-63H/2-C4	SGB-63H/2-D4	
	6	SGB-63H/2-B6	SGB-63H/2-C6	SGB-63H/2-D6	
	10	SGB-63H/2-B10	SGB-63H/2-C10	SGB-63H/2-D10	
	13	SGB-63H/2-B13	SGB-63H/2-C13	SGB-63H/2-D13	
	16	SGB-63H/2-B16	SGB-63H/2-C16	SGB-63H/2-D16	
	20	SGB-63H/2-B20	SGB-63H/2-C20	SGB-63H/2-D20	
	25	SGB-63H/2-B25	SGB-63H/2-C25	SGB-63H/2-D25	
	32	SGB-63H/2-B32	SGB-63H/2-C32	SGB-63H/2-D32	
	40	SGB-63H/2-B40	SGB-63H/2-C40	SGB-63H/2-D40	
	50	SGB-63H/2-B50	SGB-63H/2-C50	SGB-63H/2-D50	
	63	SGB-63H/2-B63	SGB-63H/2-C63	SGB-63H/2-D63	

SGB-63H Series Miniature Circuit Breaker

	Rated current(A)	B curve	C curve	D curve	Packing unit
 SGB-63H-3P	1	SGB-63H/3-B1	SGB-63H/3-C1	SGB-63H/1-D1	4
	2	SGB-63H/3-B2	SGB-63H/3-C2	SGB-63H/1-D2	
	3	SGB-63H/3-B3	SGB-63H/3-C3	SGB-63H/1-D3	
	4	SGB-63H/3-B4	SGB-63H/3-C4	SGB-63H/1-D4	
	6	SGB-63H/3-B6	SGB-63H/3-C6	SGB-63H/1-D6	
	10	SGB-63H/3-B10	SGB-63H/3-C10	SGB-63H/1-D10	
	13	SGB-63H/3-B13	SGB-63H/3-C13	SGB-63H/1-D13	
	16	SGB-63H/3-B16	SGB-63H/3-C16	SGB-63H/1-D16	
	20	SGB-63H/3-B20	SGB-63H/3-C20	SGB-63H/1-D20	
	25	SGB-63H/3-B25	SGB-63H/3-C25	SGB-63H/1-D25	
	32	SGB-63H/3-B32	SGB-63H/3-C32	SGB-63H/1-D32	
	40	SGB-63H/3-B40	SGB-63H/3-C40	SGB-63H/1-D40	
	50	SGB-63H/3-B50	SGB-63H/3-C50	SGB-63H/1-D50	
	63	SGB-63H/3-B63	SGB-63H/3-C63	SGB-63H/1-D63	
 SGB-63H-3P+N	1	SGB-63H/3-B1N	SGB-63H/3-C1N	SGB-63H/3-D1N	3
	2	SGB-63H/3-B2N	SGB-63H/3-C2N	SGB-63H/3-D2N	
	3	SGB-63H/3-B3N	SGB-63H/3-C3N	SGB-63H/3-D3N	
	4	SGB-63H/3-B4N	SGB-63H/3-C4N	SGB-63H/3-D4N	
	6	SGB-63H/3-B6N	SGB-63H/3-C6N	SGB-63H/3-D6N	
	10	SGB-63H/3-B10N	SGB-63H/3-C10N	SGB-63H/3-D10N	
	13	SGB-63H/3-B13N	SGB-63H/3-C13N	SGB-63H/3-D13N	
	16	SGB-63H/3-B16N	SGB-63H/3-C16N	SGB-63H/3-D16N	
	20	SGB-63H/3-B20N	SGB-63H/3-C20N	SGB-63H/3-D20N	
	25	SGB-63H/3-B25N	SGB-63H/3-C25N	SGB-63H/3-D25N	
	32	SGB-63H/3-B32N	SGB-63H/3-C32N	SGB-63H/3-D32N	
	40	SGB-63H/3-B40N	SGB-63H/3-C40N	SGB-63H/3-D40N	
	50	SGB-63H/3-B50N	SGB-63H/3-C50N	SGB-63H/3-D50N	
	63	SGB-63H/3-B63N	SGB-63H/3-C63N	SGB-63H/3-D63N	
 SGB-63H-4P	1	SGB-63H/4-B1	SGB-63H/4-C1	SGB-63H/4-D1	3
	2	SGB-63H/4-B2	SGB-63H/4-C2	SGB-63H/4-D2	
	3	SGB-63H/4-B3	SGB-63H/4-C3	SGB-63H/4-D3	
	4	SGB-63H/4-B4	SGB-63H/4-C4	SGB-63H/4-D4	
	6	SGB-63H/4-B6	SGB-63H/4-C6	SGB-63H/4-D6	
	10	SGB-63H/4-B10	SGB-63H/4-C10	SGB-63H/4-D10	
	13	SGB-63H/4-B13	SGB-63H/4-C13	SGB-63H/4-D13	
	16	SGB-63H/4-B16	SGB-63H/4-C16	SGB-63H/4-D16	
	20	SGB-63H/4-B20	SGB-63H/4-C20	SGB-63H/4-D20	
	25	SGB-63H/4-B25	SGB-63H/4-C25	SGB-63H/4-D25	
	32	SGB-63H/4-B32	SGB-63H/4-C32	SGB-63H/4-D32	
	40	SGB-63H/4-B40	SGB-63H/4-C40	SGB-63H/4-D40	
	50	SGB-63H/4-B50	SGB-63H/4-C50	SGB-63H/4-D50	
	63	SGB-63H/4-B63	SGB-63H/4-C63	SGB-63H/4-D63	

SGB-63M/H Series Miniature Circuit Breaker

Curves



B type C type D type

Overcurrent protecting characteristics

NO.	Rated current of release(A)	Initial state	Test current	Specified time	Result to be obtained	Remarks
1	1-63	cold state	1.13In	t≤1h	Non-trip	
2	1-63	upon the previous test	1.45In	t<1h	trip	Setting current up to specified value steadily in 5s
3	In≤32 In>32	cold state	2.55In	1s<t<60s 1s<t<120s	trip	
4	1-63	cold state	3In 5In 5In 10In 10In 20In	t≤0.1s t<0.1s t≤0.1s t<0.1s t≤0.1s t<0.1s	Non-trip trip Non-trip trip Non-trip trip	B type B type C type C type D type D type

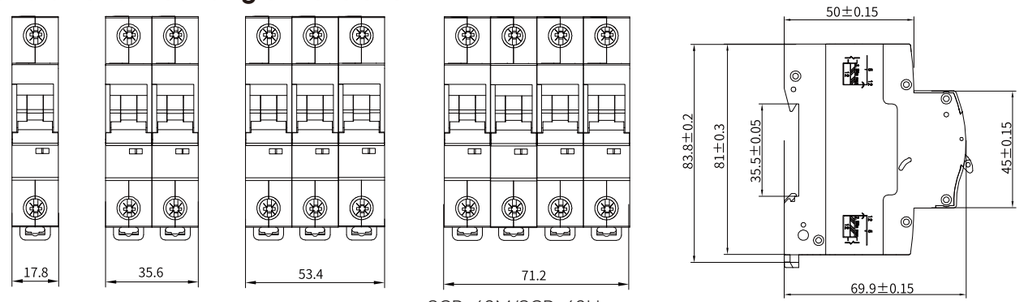
Endurance(operations)

Category	Operations	Operation frequency	Rated current
Electrical endurance	4000	240/h	1-32
		120/h	40-63
Mechanical endurance	10000	240/h	1-63

Features

Much higher short circuit breaking capacity, Dual-connection convenient for both standard busbar and conductor connection. Improved safety of operators offered by special design from terminals. Much longer service life thanks to energy-storage operating mechanism.Enclosure and functional parts made from imported plastics with flame-retardant, heat-resistant, and impulse-proof properties.Higher current-limiting capacity ensuring a cost-effective range of products. Different handle color for different rated current with contactor condition indicator.

Overall and mounting dimensions



SGB-63M/SGB-63H

SGB-63M-DC Series Miniature Circuit Breaker

Standard	IEC/EN 60947-2 GB/T 14048.2
Breaking capacity(kA)	6
Protection	Against overload and short circuit
Rated current(A) In	1,2,3,4,6,10,13,16,20,25,32,40,50,63
Rated voltage(V)	1P DC 120; 2P,3P,4P DC 240
Operational volatge	Min.:12
Ambient temperature (℃)	-25~+40,Max.95%humidity
Thermal operating limit	1.05 xIn No tripping within an hour
	1.3 xIn Tripping within an hour
Magnertic operating	(8-12)xIn
Number of poles	1P,2P,3P and 4P
Type of trip	Thermal/ magnetic release
Terminal capacity	16mm² flexible or 25mm² rigid
Protection degree	IP20
Installation	Mounting on 35mm DIN rail
Width	18mm per pole
Certification	TÜV CE CB

SGB-63M-DC-1P

SGB-63M-DC-2P

SGB-63M-DC-3P

SGB-63M-DC-4P

SGB-63M-DC Series Miniature Circuit Breaker

	Rated current(A)	DC type	Packing unit
 SGB-63M-DC-1P	1	SGB-63M/1-DC1	12
	2	SGB-63M/1-DC2	
	3	SGB-63M/1-DC3	
	4	SGB-63M/1-DC4	
	6	SGB-63M/1-DC6	
	10	SGB-63M/1-DC10	
	13	SGB-63M/1-DC13	
	16	SGB-63M/1-DC16	
	20	SGB-63M/1-DC20	
	25	SGB-63M/1-DC25	
	32	SGB-63M/1-DC32	
	40	SGB-63M/1-DC40	
	50	SGB-63M/1-DC50	
	63	SGB-63M/1-DC63	
 SGB-63M-DC-2P	1	SGB-63M/2-DC1	6
	2	SGB-63M/2-DC2	
	3	SGB-63M/2-DC3	
	4	SGB-63M/2-DC4	
	6	SGB-63M/2-DC6	
	10	SGB-63M/2-DC10	
	13	SGB-63M/2-DC13	
	16	SGB-63M/2-DC16	
	20	SGB-63M/2-DC20	
	25	SGB-63M/2-DC25	
	32	SGB-63M/2-DC32	
	40	SGB-63M/2-DC40	
	50	SGB-63M/2-DC50	
	63	SGB-63M/2-DC63	

SGB-63M-DC Series Miniature Circuit Breaker

	Rated current(A)	DC type	Packing unit
 SGB-63M-DC-3P	1	SGB-63M/3-DC1	4
	2	SGB-63M/3-DC2	
	3	SGB-63M/3-DC3	
	4	SGB-63M/3-DC4	
	6	SGB-63M/3-DC6	
	10	SGB-63M/3-DC10	
	13	SGB-63M/3-DC13	
	16	SGB-63M/3-DC16	
	20	SGB-63M/3-DC20	
	25	SGB-63M/3-DC25	
	32	SGB-63M/3-DC32	
	40	SGB-63M/3-DC40	
	50	SGB-63M/3-DC50	
	63	SGB-63M/3-DC63	
 SGB-63M-DC-4P	1	SGB-63M/4-DC1	3
	2	SGB-63M/4-DC2	
	3	SGB-63M/4-DC3	
	4	SGB-63M/4-DC4	
	6	SGB-63M/4-DC6	
	10	SGB-63M/4-DC10	
	13	SGB-63M/4-DC13	
	16	SGB-63M/4-DC16	
	20	SGB-63M/4-DC20	
	25	SGB-63M/4-DC25	
	32	SGB-63M/4-DC32	
	40	SGB-63M/4-DC40	
	50	SGB-63M/4-DC50	
	63	SGB-63M/4-DC63	

SGB-63M-DC Series Miniature Circuit Breaker

Overcurrent protecting characteristics

NO.	Rated current of release(A)	Initial state	Test current	Specified time	Result to be obtained	Remarks	Reference Temperature
1	1-63	cold state	1.05In	t≤1h	Non-trip		30℃±2℃
2	1-63	upon the previous test	1.30In	t<1h	trip	Setting current up to specified value steadily in 5s	
3	In≤32 In>32	cold state	2.55In	1s<t<60s 1s<t<120s	trip		
	1-63	cold state	8In 12In	t≤0.2s t<0.2s	Non-trip trip	Ii=10In	

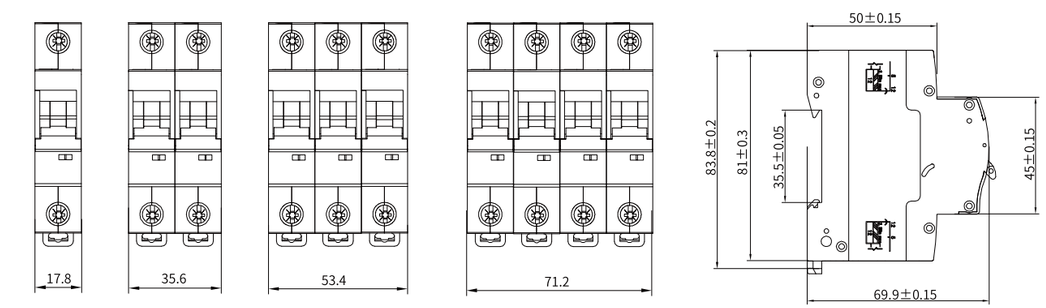
Endurance(operations)

Category	Operations	Operation frequency	Rated current
Electrical endurance	1500	240/h	1-32
		120/h	40-63
Mechanical endurance	8500	240/h	1-63

Features

Much higher short circuit breaking capacity, Dual-connection convenient for both standard busbar and conductor connection. Improved safety of operators offered by special design from terminals. Much longer service life thanks to energy-storage operating mechanism.Enclosure and functional parts made from imported plastics with flame-retardant, heat-resistant, and impulse-proof properties.Higher current-limiting capacity ensuring a cost-effective range of products. Different handle color for different rated current with contactor condition indicator.

Overall and mounting dimensions



SGB-63M-DC

SG-DPN Series "Phase+Neutral" Circuit Breaker

Standard	EN/IEC60898-1 GB/T 10963.1
Breaking capacity(kA)	3,4.5,6
Protection	Overload and short circuit
Rated insulation voltage Ui(V)	500
Rated impulse withstand voltage Uimp(kV)	4
Rated current(A) In	2,4,6,10,13,16,20,25,32
Rated voltage(V)	AC 240
Characteristic	B,C Curve
Number of poles	1P+N
Type of trip	Thermal/magnetic release
Terminal capacity	1-10mm² wire
Protection degree	IP20
Installation	Mounting on 35mm DIN rail
Width	18mm per pole
Electrical endurance	4000
Mechanical endurance	10000
Altitude	≤2000m
Certification	CCC VDE CE CB

SG-DPN3K

SG-DPN4.5K

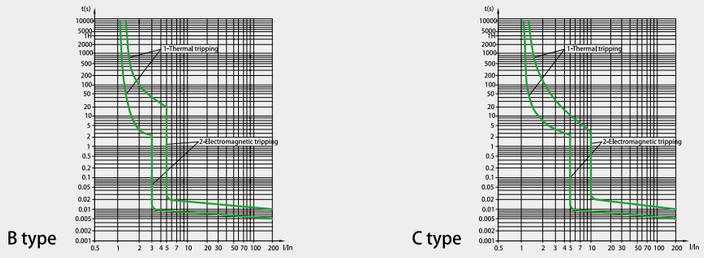
SG-DPN4.5K

SG-DPN Series "Phase+Neutral" Circuit Breaker

	Rated current(A)	B curve	C curve	Packing unit
 SG-DPN3K	2	SG-DPN3K-B2	SG-DPN3K-C2	12
	4	SG-DPN3K-B4	SG-DPN3K-C4	
	6	SG-DPN3K-B6	SG-DPN3K-C6	
	10	SG-DPN3K-B10	SG-DPN3K-C10	
	13	SG-DPN3K-B13	SG-DPN3K-C13	
	16	SG-DPN3K-B16	SG-DPN3K-C16	
	20	SG-DPN3K-B20	SG-DPN3K-C20	
	25	SG-DPN3K-B25	SG-DPN3K-C25	
	32	SG-DPN3K-B32	SG-DPN3K-C32	
 SG-DPN4.5K	2	SG-DPN4.5K-B2	SG-DPN4.5K-C2	12
	4	SG-DPN4.5K-B4	SG-DPN4.5K-C4	
	6	SG-DPN4.5K-B6	SG-DPN4.5K-C6	
	10	SG-DPN4.5K-B10	SG-DPN4.5K-C10	
	13	SG-DPN4.5K-B13	SG-DPN4.5K-C13	
	16	SG-DPN4.5K-B16	SG-DPN4.5K-C16	
	20	SG-DPN4.5K-B20	SG-DPN4.5K-C20	
	25	SG-DPN4.5K-B25	SG-DPN4.5K-C25	
	32	SG-DPN4.5K-B32	SG-DPN4.5K-C32	
 SG-DPN6K	2	SG-DPN6K-B2	SG-DPN6K-C2	12
	4	SG-DPN6K-B4	SG-DPN6K-C4	
	6	SG-DPN6K-B6	SG-DPN6K-C6	
	10	SG-DPN6K-B10	SG-DPN6K-C10	
	13	SG-DPN6K-B13	SG-DPN6K-C13	
	16	SG-DPN6K-B16	SG-DPN6K-C16	
	20	SG-DPN6K-B20	SG-DPN6K-C20	
	25	SG-DPN6K-B25	SG-DPN6K-C25	
	32	SG-DPN6K-B32	SG-DPN6K-C32	

SG-DPN Series "Phase+Neutral" Circuit Breaker

Curves



B type

C type

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

Rated current In(A)	Nominal cross sectional area(mm^2)	Tightening torque (N.m)
6	1	1.2
10	1.5	
16-20	2.5	
25	4	
32	6	

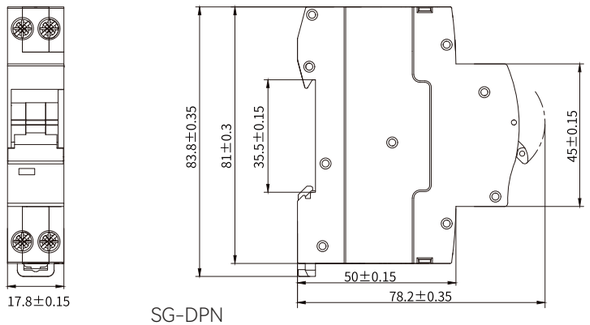
Overcurrent protecting characteristics

NO.	Rated current of release(A)	Initial state	Test current	Specified time	Result to be obtained	Remarks	Reference Temperature
1	6-32	Cold state	1.13In	t≤1h	Non-trip		30℃+5℃
2	6-32	Upon the previous test	1.45In	t<1h	Trip	Setting current up to specified value steadily in 5s	
3	In≤32	Cold state	2.55In	1s<t<60s	Trip		
4	6-32	Cold state	3In 5In 5In 10In	t≤0.1s t<0.1s t≤0.1s t<0.1s	Non-trip Trip Non-trip Trip	B type B type C type C type	

Features

Compact design and cost-effective;
Enclosure and functional parts made from imported plastics with flame-retardant,heat-resistant,and impulse-proof properties; Potential electric shock is avoided thanks to neutral-line being directly connected to the product;
Convenient and time-saving mounting.

Overall and mounting dimensions



SG-DPN

SGB-125H/M/L Series Miniature Circuit Breaker

Standard	IEC60898-1	IEC60947-2
Thermal operating limit	(1.13-1.45)xIn	(1.05-1.30)xIn
Magnetic operating	B:(3-5)xIn;C:(5-10)xIn; D:(10-20)xIn	Ii=8In;Ii=10In;Ii=12In
Protection	Against overload and short circuit	
Rated current(A) In	63,80,100,125	
Rated voltage(V)	230/400,240/415Vac for 1P 400/415Vac for 2P,3P,4P	
Rated insulation voltage Ui(V)	500	
Number of poles	1P,2P,3P,4P	
Type of trip	Thermal/ magnetic release	
Terminal capacity	Flexible cables: 1.5 to $35mm^2$ Rigid cables: 1 to $50mm^2$	
Installation	Mounting on 35mm DIN rail	
Width	27mm per pole	
Certification	KEMA EUR CE CB	VDE

SGB-125H/M/L-1P SGB-125H/M/L-2P SGB-125H/M/L-3P SGB-125H/M/L-4P

SGB-125H/M/L Series Miniature Circuit Breaker

	Rated current(A)	IEC60947-2			Packing unit
		Ii=8In	Ii=10In	Ii=12In	
 SGB-125H/M/L-1P	63	SGB-125H/M/L/1-63Ii8	SGB-125H/M/L/1-63Ii10	SGB-125H/M/L/1-63Ii12	12
	80	SGB-125H/M/L/1-80Ii8	SGB-125H/M/L/1-80Ii10	SGB-125H/M/L/1-80Ii12	
	100	SGB-125H/M/L/1-100Ii8	SGB-125H/M/L/1-100Ii10	SGB-125H/M/L/1-100Ii12	
	125	SGB-125H/M/L/1-125Ii8	SGB-125H/M/L/1-125Ii10	SGB-125H/M/L/1-125Ii12	
 SGB-125H/M/L-2P	63	SGB-125H/M/L/2-63Ii8	SGB-125H/M/L/2-63Ii10	SGB-125H/M/L/2-63Ii12	6
	80	SGB-125H/M/L/2-80Ii8	SGB-125H/M/L/2-80Ii10	SGB-125H/M/L/2-80Ii12	
	100	SGB-125H/M/L/2-100Ii8	SGB-125H/M/L/2-100Ii10	SGB-125H/M/L/2-100Ii12	
	125	SGB-125H/M/L/2-125Ii8	SGB-125H/M/L/2-125Ii10	SGB-125H/M/L/2-125Ii12	
 SGB-125H/M/L-3P	63	SGB-125H/M/L/3-63Ii8	SGB-125H/M/L/3-63Ii10	SGB-125H/M/L/3-63Ii12	4
	80	SGB-125H/M/L/3-80Ii8	SGB-125H/M/L/3-80Ii10	SGB-125H/M/L/3-80Ii12	
	100	SGB-125H/M/L/3-100Ii8	SGB-125H/M/L/3-100Ii10	SGB-125H/M/L/3-100Ii12	
	125	SGB-125H/M/L/3-125Ii8	SGB-125H/M/L/3-125Ii10	SGB-125H/M/L/3-125Ii12	
 SGB-125H/M/L-4P	63	SGB-125H/M/L/4-63Ii8	SGB-125H/M/L/4-63Ii10	SGB-125H/M/L/4-63Ii12	3
	80	SGB-125H/M/L/4-80Ii8	SGB-125H/M/L/4-80Ii10	SGB-125H/M/L/4-80Ii12	
	100	SGB-125H/M/L/4-100Ii8	SGB-125H/M/L/4-100Ii10	SGB-125H/M/L/4-100Ii12	
	125	SGB-125H/M/L/4-125Ii8	SGB-125H/M/L/4-125Ii10	SGB-125H/M/L/4-125Ii12	

SGB-125H/M/L Series Miniature Circuit Breaker

	Rated current(A)	IEC60898-1			Packing unit
		B curve	C curve	D curve	
 SGB-125H/M/L-1P	63	SGB-125H/M/L/1-B63	SGB-125H/M/L/1-C63	SGB-125H/M/L/1-D63	12
	80	SGB-125H/M/L/1-B80	SGB-125H/M/L/1-C80	SGB-125H/M/L/1-D80	
	100	SGB-125H/M/L/1-B100	SGB-125H/M/L/1-C100	SGB-125H/M/L/1-D100	
	125	SGB-125H/M/L/1-B125	SGB-125H/M/L/1-C125	SGB-125H/M/L/1-D125	
 SGB-125H/M/L-2P	63	SGB-125H/M/L/2-B63	SGB-125H/M/L/2-C63	SGB-125H/M/L/2-D63	6
	80	SGB-125H/M/L/2-B80	SGB-125H/M/L/2-C80	SGB-125H/M/L/2-D80	
	100	SGB-125H/M/L/2-B100	SGB-125H/M/L/2-C100	SGB-125H/M/L/2-D100	
	125	SGB-125H/M/L/2-B125	SGB-125H/M/L/2-C125	SGB-125H/M/L/2-D125	
 SGB-125H/M/L-3P	63	SGB-125H/M/L/3-B63	SGB-125H/M/L/3-C63	SGB-125H/M/L/3-D63	4
	80	SGB-125H/M/L/3-B80	SGB-125H/M/L/3-C80	SGB-125H/M/L/3-D80	
	100	SGB-125H/M/L/3-B100	SGB-125H/M/L/3-C100	SGB-125H/M/L/3-D100	
	125	SGB-125H/M/L/3-B125	SGB-125H/M/L/3-C125	SGB-125H/M/L/3-D125	
 SGB-125H/M/L-4P	63	SGB-125H/M/L/4-B63	SGB-125H/M/L/4-C63	SGB-125H/M/L/4-D63	3
	80	SGB-125H/M/L/4-B80	SGB-125H/M/L/4-C80	SGB-125H/M/L/4-D80	
	100	SGB-125H/M/L/4-B100	SGB-125H/M/L/4-C100	SGB-125H/M/L/4-D100	
	125	SGB-125H/M/L/4-B125	SGB-125H/M/L/4-C125	SGB-125H/M/L/4-D125	

Overcurrent protecting characteristics

Standard	IEC60947-2						IEC60898-1					
Short-time delay	Overload tripping characteristic						Overload tripping characteristic					
	Test current		Tripping characteristic	Test requirements			Test current		Tripping characteristic	Test requirements		
	2.55In			1s < t < 120s			2.55In			1s < t < 120s		
Long-time delay	Inverse time overload protection characteristic (reference ambient temperature +30℃)											
	Test current designation	Current setting multiplier	Conventional time		Initial condition		Test current designation	Current setting multiplier	Conventional time		Initial condition	
			In≤63A	In > 63A					In≤63A	In > 63A		
	Conventional non-tripping current	1.05	≥1h	≥2h	Cold state		Conventional non-tripping current	1.13	≥1h	≥2h	Cold state	
	Conventional tripping current	1.3	< 1h	< 2h	Immediately following the 1.05In test		Conventional tripping current	1.45	< 1h	< 2h	Immediately following the 1.1.3In test	

IEC60947-2

2In overload protection characteristic (reference ambient temperature +30℃) shall meet the requirements in the following table

Time setting and tolerance: 2In tripping time ≤ 10 minutes

SGB-125H/M/L Series Miniature Circuit Breaker

Endurance(operations)

	Category	Operations		Category	Operations
IEC 60898-1	Electrical endurance	5000	IEC 60947-2	Electrical endurance	3000
	Mechanical endurance	10000		Mechanical endurance	8500

Curves

IEC 60947-2	Ii=8In	6.4In	≥0.2sNon-trip	IEC 60898-1	B	3In	≥0.1sNon-trip
		9.6In	< 0.2sTrip			5In	< 0.1sTrip
	Ii=10In	8In	≥0.2sNon-trip		C	5In	≥0.1sNon-trip
		12In	< 0.2sTrip			10In	< 0.1sTrip
	Ii=12In	9.6In	≥0.2sNon-trip		D	10In	≥0.1sNon-trip
		14.4In	< 0.2sTrip			20In	< 0.1sTrip

Breaking capacity

Standard	IEC60898-1			IEC60947-2		
Breaking capacity level	H	M	L	H	M	L
Icn（kA）	15	10	6	15	10	6
Ics（kA）	10	7.5	6	7.5	7.5	6

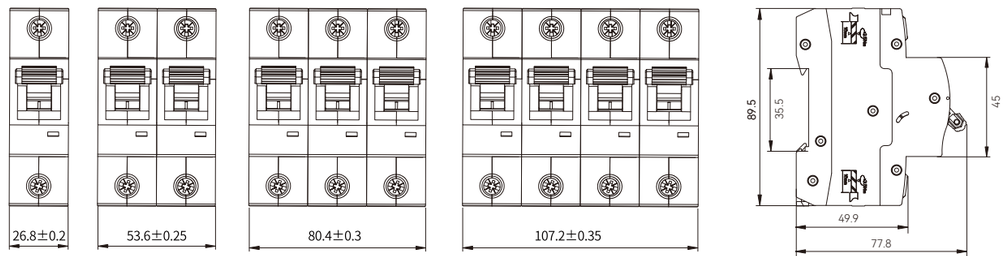
Wiring (The suitable conductors should be used for connection, see table below for relative parameters)

Rated current In(A)	Nominal cross section area s(mm²)	Tightening torque (N.m)
63	16	3.5
80	25	
100	35	
125	50	

Features

- Service life of product has been greatly enhanced through special designed tripping mechanism.
- Long-time and reliable operation.
- Enclosure and functional parts made from imported plastics with flame-retardant, heat-resistant, and impulse-proof properties.
- Compact and modularized design.
- Convenient mounting.
- Full sets of additional components and full sets of accessories.

Overall and mounting dimensions



SGB-125H/M/L

SGI-R Series Isolating Switch

Standard	EN/IEC60947-3 GB/T 14048.3
Number of poles	1P,2P,3P,4P
Rated currents	16,20,25,32,40,50,63,80,100,125A
Rated voltage(V)	1P AC 240 2,3,4P AC 415
Utilization category	AC-22A
Rated short-time withstand current Icw(Ie)	12Ie/1s
Rated short-circuit making capacity Icm(Ie)	20Ie
Rated making & breaking capacity	3Ie,1.05Ue,COSΦ=0.65
Rated insulation voltage Ui(V)	690
Rated impulse withstand voltage Uimp(kV)	6
Electrical endurance	1500
Mechanical endurance	8500
Terminal capacity	16~100A:2.5~35mm² 125A:50mm²
Ambient temperature(℃)	-25~+40,Max.95%humidity
Storage temperature(℃)	-20~+60
Altitude (meters)	Max. 2000
Protection degree	IP20
Installation	Mounting on 35mm DIN rail
Width	18mm per pole
Certification	Intertek CE CB

SGI-R-1P SGI-R-2P SGI-R-3P SGI-R-4P

SGI-R Series Isolating Switch

	Rated current(A)	IEC60898-1	Packing unit
 SGI-R-1P	16	SGI-R-16/1	12
	20	SGI-R-20/1	
	25	SGI-R-25/1	
	32	SGI-R-32/1	
	40	SGI-R-40/1	
	50	SGI-R-50/1	
	63	SGI-R-63/1	
	80	SGI-R-80/1	
	100	SGI-R-100/1	
	125	SGI-R-125/1	
 SGI-R-2P	16	SGI-R-16/2	6
	20	SGI-R-20/2	
	25	SGI-R-25/2	
	32	SGI-R-32/2	
	40	SGI-R-40/2	
	50	SGI-R-50/2	
	63	SGI-R-63/2	
	80	SGI-R-80/2	
	100	SGI-R-100/2	
	125	SGI-R-125/2	
 SGI-R-3P	16	SGI-R-16/3	4
	20	SGI-R-20/3	
	25	SGI-R-25/3	
	32	SGI-R-32/3	
	40	SGI-R-40/3	
	50	SGI-R-50/3	
	63	SGI-R-63/3	
	80	SGI-R-80/3	
	100	SGI-R-100/3	
	125	SGI-R-125/3	
 SGI-R-4P	16	SGI-R-16/4	3
	20	SGI-R-20/4	
	25	SGI-R-25/4	
	32	SGI-R-32/4	
	40	SGI-R-40/4	
	50	SGI-R-50/4	
	63	SGI-R-63/4	
	80	SGI-R-80/4	
	100	SGI-R-100/4	
	125	SGI-R-125/4	

SGI-R Series Isolating Switch

Endurance(operations)

Category	Operations	Operation frequency	Rated current
Electrical endurance	1500	120/h	16~125A
Mechanical endurance	8500	120/h	16~125A

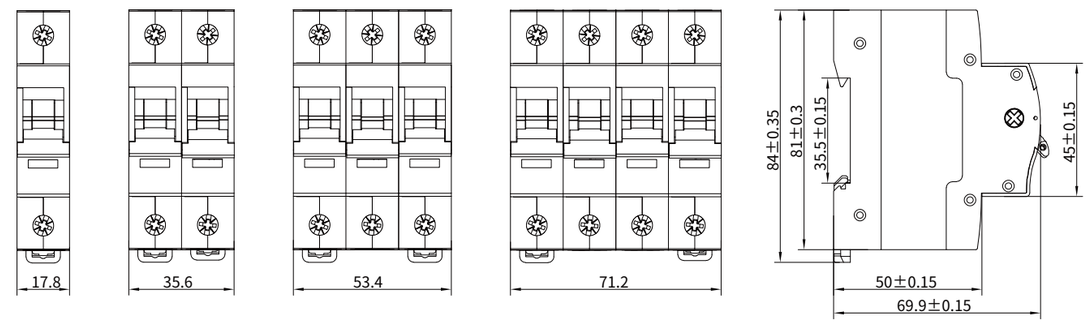
Wiring (The suitable conductors should be used for connection, see table below for relative parameters)

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

Features

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

Overall and mounting dimensions



SGI-R

MCB Accessories Series

SGBA Series MCB Accessory
SGSO Series Door Bell
SGSL Series Indicating Light

MAXGE

SGBA Series	Circuit Breaker Accessories
Rated voltage(V)	AC 230
Rated frequency(Hz)	50/60Hz
Ambient temperature(℃)	-25~+40,Max.95%humidity
Storage temprature (℃)	-20~+60
Electric endurance	4000
Mechanical endurance	10000
Protection degree	IP20

SGBA-OF SGBA-SD SGBA-MN SGBA-MX SGB-63M-1P

SGBA Series Circuit Breaker Accessories

Application

Applicable to MCB model SGB-63,used to control remote signaling device, Mounted on the left side of the MCB SGB-63,indicating "ON", "OFF" status of combined MCB.

OF + MX + SGB-63M

Combination scheme

OF	SGB-63

OF	MX	SGB-63

OF Auxiliary Contact

Type code	Rated voltage (V)	Rated current (A)
AC-12	230	4
AC-14	230	2
DC-12	110	0.5
DC-12	48	1

- Dielectric strength: 1500V/1 min
- Electro-mechanical endurance:≥5000

MX Shunt Trip

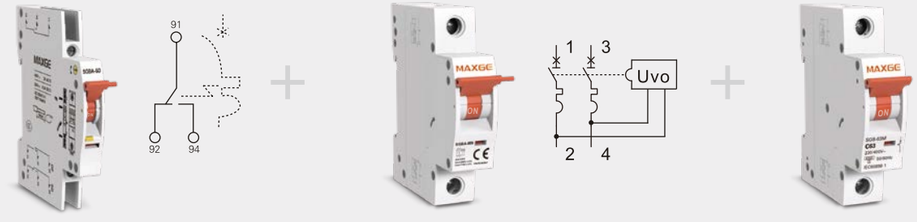
Type code	Rated voltage (V)
AC	AC 230V
DC	DC 24/48V

- Rated insulation voltage(Ui): 500V
- Operate voltage range: 70-110% Us
- Dielectric strength: 2kV/1 min
- Electro-mechanical endurance:≥4000
- Mounting on the left side of MCB/RCBO, used to trip the combined MCB/RCBO by remote controlling device.

SGBA Series Circuit Breaker Accessories

Application

Applicable to MCB model SGB-63, used to control remote signaling device, is used to indicate remote fault tripping and "ON" or "OFF" position of associated devices.



SD + MN + SGB-63M

Combination scheme

SD	SGB-63

SD	MN	SGB-63

SD Alarm Switch

Type code	Rated voltage (V)	Rated current (A)
AC-12	230	4
AC-14	230	2
DC-12	110	0.5
DC-12	48	1

- Dielectric strength: 1500V/1 min
- Electro-mechanical endurance:≥5000
- Is used to connect ON/OFF auxiliary contact, work as circuit breaker ON/OFF indicator in case of faulty (tripping).

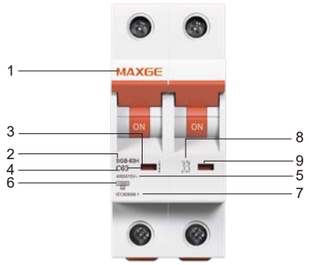
MN Over-voltage/Under-voltage Tripper

Type code	Rated voltage (V)
MN23A	AC 230

- Rated insulation voltage(Ui): 500V
- Over-voltage tripping range: 280V±5%
- Under-voltage tripping range: 170V±5%
- Electro-mechanicalendurance:≥ 4000
- Mounted on the left side of circuit breaker, actuate the combined device to trip in case of under-voltage or over-voltage, effectively prevent the device from closing operation under abnormal power voltage condition.

Benefits

1.Brand
2.Type
3. Rated current
4. Tripping type
5. Rated voltage
6. Energy Limiting
7.Approval
9.Electrical wiring diagram
9.ON/OFFindication



- **Attractive device design**
- **Easily recognized, color-coded switching position**
- **Indication integrated in the handle.**

- **Well matched with RCCB SGR**

- **Well matched with Isolator SGI-R**

- **Auxiliary contacts can be added on the left side of the MCB**

- **Ergonomic handle for user-friendly switching**

- **Safety terminal:**
  - **easy wiring**
  - **protection degree IP20.**
- **Pozidriv and slot screw head. Torque up to 2.5 N.m.**

- **MCB and RCCB can be connected with PIN type busbar both at the top and bottom terminals.with easy DIN-rail extraction.**

- **MCB and RCCB can be connected with FORK type busbar both at the top and bottom terminals.with easy DIN-rail extraction.**

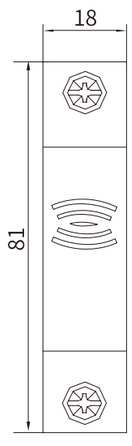
SGSO Series Door Bell

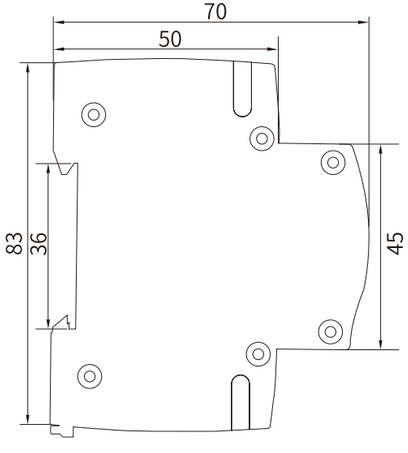
Standard	EN/IEC 61558-1
Electric ratings	8V12V,24V110V230V 50/60Hz
Installation class	II & III
Pollution grade	II
Working condition	Short-time working
Degree of protection	IP20
Mounting	35mm DI Nrail

Operational voltage(V)	Code NO.	Capacity (VA)	Noise level	Packing unit
8	SGSO-8	4.8	78dB	12
12	SGSO-12	4.8		
24	SGSO-24	4.8		
110	SGSO-110	4.4		
230	SGSO-230	4.0		

Overall and mounting dimensions

SGSO



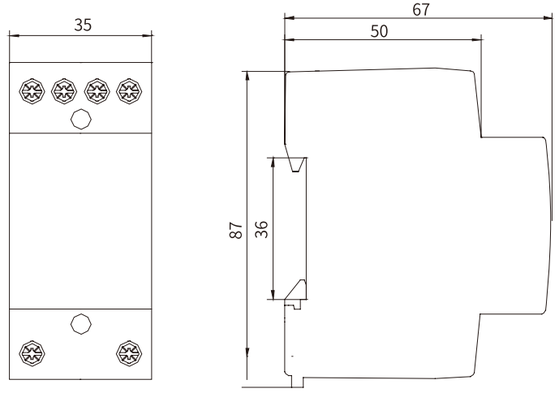


SGTF-8 Series Transformer

Standard	EN/IEC 61558-1
Input voltage(V)	AC 230
Output voltage(V)	4,6,8,12,16,24
Rated power outpu	8VA
Consumption(W)	1.15
Pollution class	I
Mounting	35mm DIN rail
Service period	Continuous operating
Connection terminals	Pillar terminal with clamp
Connection capacity	Rigid conductor 10mm²
Terminal Connection Height	H=15.5mm

Rated output power P2(VA)	Code NO.	Rated voltage		Current w/o Load Io(A)	Power consumption w/o Load Po(W)	Coil Temperature rising(℃)
		Primary U1(V)	Secondary U2(U)			
8	SGTF-8-4	230(240)	4	36±6	1.15	50
	SGTF-8-6		6			
	SGTF-8-8		8			
	SGTF-8-12		12			
	SGTF-8-16		16			
	SGTF-8-24		24			

Overall and mounting dimensions



SGTF-8

SGSL-1 Series Indicating Light

Standard	EN/IEC60947-5-1
Rated current AC12(A)	20
Electric ratings	Up to AC 230 50/60Hz
Rated insulation Voltage Ui(V)	500
Illumination	LED,Incandescence,neon
Life	Incandescence lamp ≥1000h Neon lamp ≥2000h LED ≥30000h
Ambient temperature(℃)	-5~+40,max.95% humidity
Storage temperature(℃)	-40~+75
Connection capacity(mm²)	1-16
Color	Green,red,yellow,blue,white
Type of terminal	Pin type and Lug type
Protection degree	IP20
Mounting	35mm DIN rail

SGSL-1 Red

SGSL-1 Yellow

SGSL-1 Green

SGSL-1 Series Indicating Light

	Rated voltage (V)	Code NO.	Illumination	color	Packing unit
 SGSL-1 Red	AC/DC 6.3V	SGSL-1-G-L6	Neon incandescence LED	Green	12
	AC/DC 12V	SGSL-1-G-L12			
	AC/DC 24V	SGSL-1-G-L24			
	AC/DC 110V	SGSL-1-G-L110			
	AC/DC 230V	SGSL-1-G-L230			
	AC/DC 6.3V	SGSL-1-R-L6	Neon incandescence LED	Red	12
	AC/DC 12V	SGSL-1-R-L12			
	AC/DC 24V	SGSL-1-R-L24			
	AC/DC 110V	SGSL-1-R-L110			
	AC/DC 230V	SGSL-1-R-L230			
 SGSL-1 Yellow	AC/DC 6.3V	SGSL-1-Y-L6	Neon incandescence LED	Yellow	12
	AC/DC 12V	SGSL-1-Y-L12			
	AC/DC 24V	SGSL-1-Y-L24			
	AC/DC 110V	SGSL-1-Y-L110			
	AC/DC 230V	SGSL-1-Y-L230			
	AC/DC 6.3V	SGSL-1-B-L6	Neon incandescence LED	Blue	12
	AC/DC 12V	SGSL-1-B-L12			
	AC/DC 24V	SGSL-1-B-L24			
	AC/DC 110V	SGSL-1-B-L110			
	AC/DC 230V	SGSL-1-B-L230			
 SGSL-1 Green	AC/DC 6.3V	SGSL-1-W-L6	Neon incandescence LED	White	12
	AC/DC 12V	SGSL-1-W-L12			
	AC/DC 24V	SGSL-1-W-L24			
	AC/DC 110V	SGSL-1-W-L110			
	AC/DC 230V	SGSL-1-W-L230			

SGSL-3 Series Indicating Light With Three Lights

Standard	EN/IEC60947-5-1
Rated current AC12(A)	20
Electric ratings	Up to AC 230V 50/60Hz
Rated insulation Voltage Ui(V)	500
Illumination	LED,Incandescence,neon
Life	Incandescence lamp ≥1000h Neon lamp ≥2000h LED ≥30000h
Ambient temperature(℃)	-5~+40,max.95% humidity
Storage temperature(℃)	-40~+75
Connection capacity(mm^2)	1-16
Color	Red+Blue+Green
Type of terminal	Pin type
Protection degree	IP20
Mounting	35mm DIN rail

SGB-OUPA Overvoltage or undervoltage protective device with auto-reclosing function

Main Characteristics	
Rated voltage(V)	1P+N： 230V AC 3P+N： 400V AC
Rated current(A) In	32A、40A、50A、63A、80A
Rated Frequency	50Hz
Overvoltage Trip (L-N)	AC275±5V
Undervoltage Trip (L-N)	AC161±5V
Undervoltage Recovery (L-N)	AC195±5V
Overvoltage Recovery (L-N)	AC253±5V
Auto-reclose Forced Delay	30±10s
Other Characteristics	
Protection Degree	Enclosure： IP20 Installed in Distribution Box： IP40
Operating Ambient Temperature	-5℃~+40℃
Storage Temperature	-40℃~+80℃

SGB-OUPA-1P+N

SGB-OUPA-3P+N

SGB-OUPA Overvoltage or undervoltage protective device with auto-reclosing function

Features

- Automatic disconnection upon overvoltage.
- Automatic disconnection upon undervoltage.
- Self-locking reclosing function after exceeding the specified number of reclosing attempts.
- Automatic connection under normal working voltage.
- Front window indicating the product's working status.
- Wiring method: Bottom entry, top exit.
- The product is installed on the load side of the main switch in the household distribution box.

Overall and mounting dimensions

1P+N

3P+N

Modular Contactor Series

SGC1 Series Modular Contactor

MAXGE

SGC1 Series	Modular Contactor
Standard	EN/IEC 61095
Maximum power	AC1220/230VAC:20A4.5KW(SGC1-20) 25A16KW(SGC1-25) AC-1/AC-7a 380/400VAC: 63A 40KW(SGC1-63) AC-3/AC-7b 380/400VAC:25A 15KW(SGC1-63) 4KW(SGC1-25)
Main contacts terminal capacity	1.5-6mm²(SGC1-10/16/20/25A) 6-16mm²(SGC1-40/63A)
Coil contact A1,A2 terminal capacity	0.75-2.5mm²
Electric endurance	≥100,000
Mechanical endurance	≥5000,000
Protection degree	IP20
Terminal tightening torque(N.m)	0.8-3.5
Ambient temperature (℃)	-5~+60,max.95% humidity
Storage temperature(℃)	-40~+75
Connection capacity(mm²)	1.5-16
Certification	TÜV CE CB

SGC1-2P(10A-25A)

SGC1-2P(32A-63A)

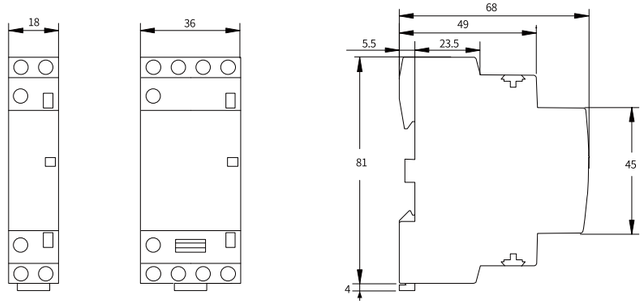
SGC1-4P(10A-25A)

SGC1-4P(32A-63A)

SGC1 Series Modular Contactor

	Code NO.	Rated current In(A)		Contact position	Control voltage (Vac)	Rated control power in (kW)	
		Ac-7a/Ac-1	Ac-7b/Ac-1			Ac-7a/230V	Ac-7b/230V
 SGC1-2P(10A-25A)	SGC1-10-11	10	4	1NO+1NC	240	2	0.75
	SGC1-10-20			2NO			
	SGC1-10-02			2NC			
	SGC1-16-11	16	6	1NO+1NC		3.2	1.0
	SGC1-16-20			2NO			
	SGC1-16-02			2NC			
	SGC1-20-11	20	7	1NO+1NC		4	1.2
	SGC1-20-20			2NO			
	SGC1-20-02			2NC			
	SGC1-25-11	25	9	1NO+1NC		5	1.4
	SGC1-25-20			2NO			
	SGC1-25-02			2NC			
 SGC1-4P(10A-25A)	SGC1-10-22	10	4	2NO+2NC		6.2	2.2
	SGC1-10-31			3NO+INC			
	SGC1-10-40			4NO			
	SGC1-10-04			4NC			
	SGC1-16-22	16	6	2NO+2NC		10	3
	SGC1-16-31			3NO+INC			
	SGC1-16-40			4NO			
	SGC1-16-04			4NC			
	SGC1-20-22	20	7	2NO+2NC		13	3.5
	SGC1-20-31			3NO+INC			
	SGC1-20-40			4NO			
	SGC1-20-04			4NC			
	SGC1-25-22	25	9	2NO+2NC		15	4
	SGC1-25-31			3NO+INC			
	SGC1-25-40			4NO			
	SGC1-25-04			4NC			

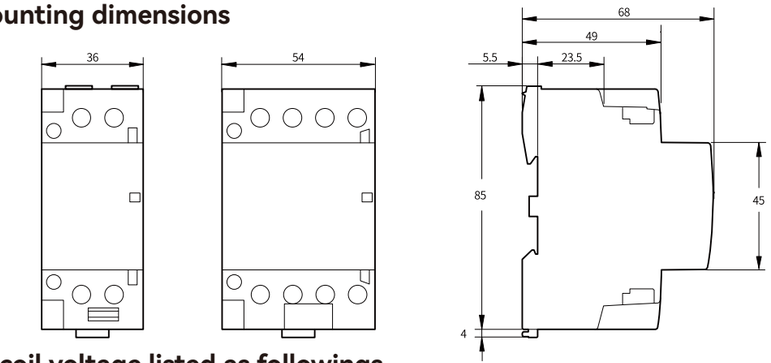
Overall and mounting dimensions



SGC1 Series Modular Contactor

	Code NO.	Rated current In(A)		Contact position	Control voltage (Vac)	Rated control power in (kW)	
		Ac-7a/Ac-1	Ac-7b/Ac-1			Ac-7a/400V	Ac-7b/400V
 SGC1-2P(32A-63A)	SGC1-32-11	32	12	1NO+1NC	240	6.5	2
	SGC1-32-20			2NO			
	SGC1-32-02			2NC			
	SGC1-40-11	40	15	1NO+1NC		8.5	2.5
	SGC1-40-20			2NO			
	SGC1-40-02			2NC			
	SGC1-63-11	63	25	1NO+1NC		13	4
	SGC1-63-20			2NO			
	SGC1-63-02			2NC			
 SGC1-4P(32A-63A)	SGC1-32-22	32	12	2NO+2NC		21	6.5
	SGC1-32-31			3NO+INC			
	SGC1-32-40			4NO			
	SGC1-32-04			4NC			
	SGC1-40-22	40	15	2NO+2NC		26	7.5
	SGC1-40-31			3NO+INC			
	SGC1-40-40			4NO			
	SGC1-40-04			4NC			
	SGC1-63-22	63	25	2NO+2NC		40	13
	SGC1-63-31			3NO+INC			
	SGC1-63-40			4NO			
	SGC1-63-04			4NC			

Overall and mounting dimensions



Refer to other coil voltage listed as followings

Coil voltage(V)	24	36	48	110	127	220	230	240	380	415	440	480	500	600	660
50Hz	B5	C5	E5	F5	G5	M5	P5	U5	Q5	N5	R5	T5	S5	-	Y5
60Hz	B6	-	E6	F6	G6	M6	P6	U6	Q6	N6	R6	T6	-	B6	-
50/60Hz	B7	C7	E7	F7	G7	M7	P7	U7	Q7	N7	R7	T7	-	-	-

SPD SERIES

Surge Protective Device

MAXGE

SGS1 Series	Surge Protective Device
Standard	IEC61643-1
Protection	Protect electric system and on-loading electrical apparatus from thunder and instanteous over-voltage
Ambient temperature(℃)	-40~+70
Number of poles	1P,2P,3P,4P
Maximum continuous Operating voltage Uc(V~)	275/320/385/440
Nominal discharge current In(8/20μs)(kA)	10/20/30/40/60
Maximum discharge current Imax(8/20μs)(kA)	20/40/60/80/100
Protection level Up(kV)	<1.3/1.4/1.5/1.6/1.7/1.8/2.2/2.5/3.0
Response time t(ns)	<25
On-Off indicating window	Green: normal function Red: functionless,immediate replacement required
Type of terminal	Pin type
Installation	Mounting on 35mm DIN rail
Ground system	TT/TN

SGS1/1

SGS1/2

SGS1/3

SGS1/4

SGS1-C Series Surge Protective Device

	Type	Poles	Uc(V~)	Discharge current		Up (kV)	Applicable grounding system
				Nominal (kA)	Max. (kA)		
 SGS1-C/1	SGS1-C/1-275-20	1	275	20	40	<1.6	TT/TN
	SGS1-C/1-320-20		320			<1.7	
	SGS1-C/1-385-20		385			<1.8	
	SGS1-C/1-440-20		440			<2.2	
 SGS1-C/2	SGS1-C/2-275-20	2	275	20	40	<1.6	TT/TN
	SGS1-C/2-320-20		320			<1.7	
	SGS1-C/2-385-20		385			<1.8	
	SGS1-C/2-440-20		440			<2.2	
 SGS1-C/3	SGS1-C/3-275-20	3	275	20	40	<1.6	TT/TN
	SGS1-C/3-320-20		320			<1.7	
	SGS1-C/3-385-20		385			<1.8	
	SGS1-C/3-440-20		440			<2.2	
 SGS1-C/4	SGS1-C/4-275-20	4	275	20	40	<1.6	TT/TN
	SGS1-C/4-320-20		320			<1.7	
	SGS1-C/4-385-20		385			<1.8	
	SGS1-C/4-440-20		440			<2.2	

SGS1-D Series Surge Protective Device

	Type	Poles	Uc(V~)	Discharge current		Up (kV)	Applicable grounding system
				Nominal (kA)	Max. (kA)		
 SGS1-D/1	SGS1-D/1-275-20	1	275	10	20	<1.2	TT/TN
	SGS1-D/1-320-20		320			<1.5	
	SGS1-D/1-385-20		385			<1.6	
	SGS1-D/1-440-20		440			<1.8	
 SGS1-D/2	SGS1-D/2-275-20	2	275	10	20	<1.2	TT/TN
	SGS1-D/2-320-20		320			<1.5	
	SGS1-D/2-385-20		385			<1.6	
	SGS1-D/2-440-20		440			<1.8	
 SGS1-D/3	SGS1-D/3-275-20	3	275	10	20	<1.2	TT/TN
	SGS1-D/3-320-20		320			<1.5	
	SGS1-D/3-385-20		385			<1.6	
	SGS1-D/3-440-20		440			<1.8	
 SGS1-D/4	SGS1-D/4-275-20	4	275	10	20	<1.2	TT/TN
	SGS1-D/4-320-20		320			<1.5	
	SGS1-D/4-385-20		385			<1.6	
	SGS1-D/4-440-20		440			<1.8	

SGS1-B Surge Protective Device

	Type	Poles	Uc(V~	Discharge current		Up (kV)	Applicable grounding system
				Nominal (kA)	Max. (kA)		
 SGS1-B/1	SGS1-B/1-385-60	1	385	30	60	<2.2	TT/TN
	SGS1-B/1-440-60		440	30	60	<2.5	
	SGS1-B/2-385-60	2	385	30	60	<2.2	TT/TN
	SGS1-B/2-440-60		440	30	60	<2.5	
	SGS1-B/3-385-60	3	385	30	60	<2.2	TT/TN
	SGS1-B/3-440-60		440	30	60	<2.5	
	SGS1-B/4-385-60	4	385	30	60	<2.2	TT/TN
	SGS1-B/4-440-60		440	30	60	<2.5	
 SGS1-B/2	SGS1-B/1-385-80	1	385	40	80	<2.5	TT/TN
	SGS1-B/1-385-100		385	60	100	<2.5	
	SGS1-B/1-440-80		440	40	80	<3.0	
	SGS1-B/1-440-100		440	60	100	<3.0	
 SGS1-B/3	SGS1-B/2-385-80	2	385	40	80	<2.5	TT/TN
	SGS1-B/2-385-100		385	60	100	<2.5	
	SGS1-B/2-440-80		440	40	80	<3.0	
	SGS1-B/2-440-100		440	60	100	<3.0	
	SGS1-B/3-385-80	3	385	40	80	<2.5	TT/TN
	SGS1-B/3-385-100		385	60	100	<2.5	
	SGS1-B/3-440-80		440	40	80	<3.0	
	SGS1-B/3-440-100		440	60	100	<3.0	
 SGS1-B/4	SGS1-B/4-385-80	4	385	40	80	<2.5	TT/TN
	SGS1-B/4-385-100		385	60	100	<2.5	
	SGS1-B/4-440-80		440	40	80	<3.0	
	SGS1-B/4-440-100		440	60	100	<3.0	

SGS1 Series Surge Protective Device

Application

Technical data \ Type	SGS1-D				SGS1-C				SGS1-B		
	275-20	320-20	385-20	440-20	275-40	320-40	385-40	440-40	385-60	385-80	385-100
Max.continuous operating vol. Uc(V~)	275	320	385	440	275	320	385	440	385	385	385
Level of vol.protection(Up<)	1.2kV	1.5kV	1.6kV	1.8kv	1.6kV	1.7KV	1.8KV	2.2kv	2.2KV	2.5KV	2.5KV
Nominal discharge curent In(8/20μs)kA	10				20				30	40	60
Max. discharge current Imax(8/20μs)kA	20				40				60	80	100
Response time t(ns)	<25										
Pole width(mm)	I8										
Colour	Orange				Grey				Red		
Protection degree	IP20										
Material of cover	PBT										
Circuit current	10~16A				25~32A				25~32A		
Wiring L,N	2.5~35mm²										
Wiring PE	4.0~35mm²										

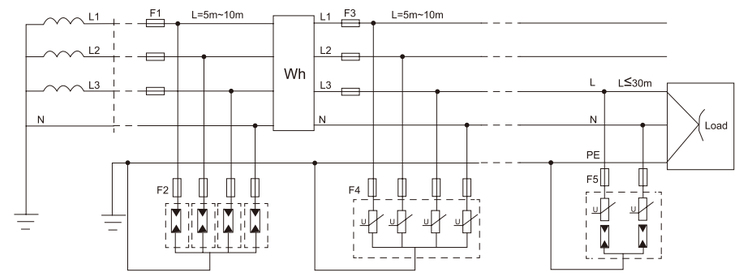
How to select surge protectors

a. The voltage should be ≤ Uc;

b.Up<maximum impulse withstands:

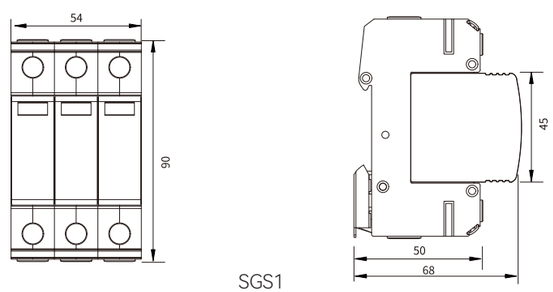
c. Different protectors should be selected according to various grounding system and protection mode.

Allocation of surge protectors under TT system



- SGS1-B series surge protector
  Protection category: B
  Over-voltage mounting category:III
  Rated impulse withstand voltage:4KV
  Parameters of discharge:Uimp and In
  Master power distribution cabinet
- SGS1-C series surge protector
  Protection category:C
  Over-voltage mounting category:II
  Rated impulse withstand voltage:2.5KV
  Parameters of discharge:Imax and In
  Branch power distribution cabinet
- SGS1-D series surge protector
  Protection category:D
  Over-voltage mounting category:I
  Rated impulse withstand voltage:1.5KV
  Parameters of discharge:Uoc and Isc
  Terminal of power distribution

Overall and mounting dimensions



SGS1

SGS1-DC Series Surge Protective Device

Standard	EN50539-11
Protection	Protect electric system and on-loading electrical appliances from thunder and instanteous over-voltage
Ambient temperature(℃)	-40 to +70
Number of poles	1P,2P,3P,4P
PV system operating voltage ucpv(V)	500/1000/1500
Standard discharge current(8/20μs) In(kA)	20
Maximum discharge current(8/20μs) Imax(kA)	40
Protection level Up(V)	≤2.5 Uc:DC 500/600 ≤3.5 Uc:DC 1000 ≤5.5 Uc:DC 1500
Response time (ns)	<25
On-Off indicating window	Green: normal function Red: functionless, immediate replacement required
Type of terminal	Pin type
Installation	Mounting on 35mm DIN rail
Certification	TÜV CE CB

SGS1-DC/1

SGS1-DC/2

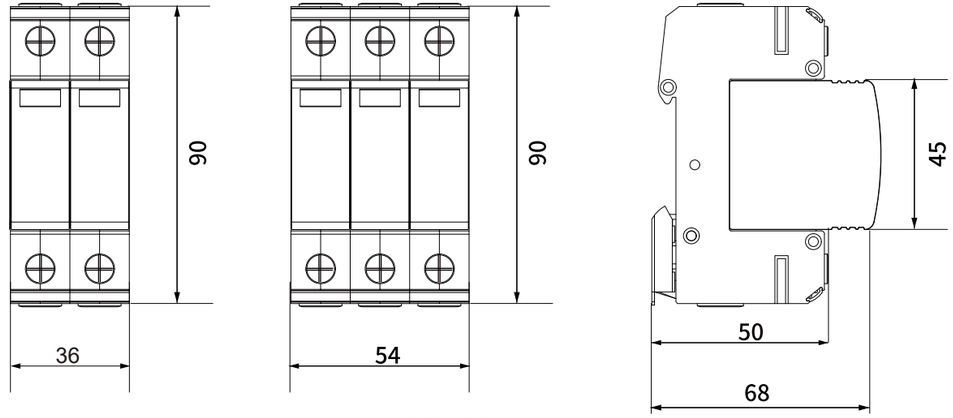
SGS1-DC/3

SGS1-DC/4

SGS1-DC Series Surge Protective Device

	Type	Poles	Uc(V~)	Discharge current Nominal(kA)	Discharge current Imax.(kA)	Up(kV)	Photovoltaic voltage
 SGS1-DC/1/2	SGS1-DC/1-500/40	1/2	500/600	20	40	≤2.5	500/600V
	SGS1-DC/2-500/40						
	SGS1-DC/1-1000/40	1/2	1000	20	40	≤3.5	1000V
	SGS1-DC/2-1000/40						
 SGS1-DC/3/4	SGS1-DC/3-500/40	3/4	500/600	20	40	≤2.5	500/600V
	SGS1-DC/4-500/40						
	SGS1-DC/3-1000/40	3/4	1000	20	40	≤3.5	1000V
	SGS1-DC/4-1000/40						
	SGS1-DC/3-1500/40	3/4	1500	20	40	≤5.5	1500V
	SGS1-DC/4-1500/40						

Overall and mounting dimensions



SGS1-DC

Fuse Holder Series

EPF-32 Series Fuse Holder
EPF-63 Series Fuse Holder
EPF-125 Series Fuse Holder

MAXGE

EPF-32 Series	Fuse Holder and Links
Standard	IEC 60947-3
Description	Fuse switch disconnector with LED indicator
Number of Poles	1P,2P,3P,4P
Fuse size	10X38
Rated operational current Ie(A)	2-32
Rated operational voltage Ue	AC 250V(1P)/AC 500V(2P-4P)
Rated insulation voltage(V)	AC 500
Rated impulse withstand voltage(kV)	4
Conditional short-circuit current(kA)	20
Utilization category with fuse	g G
Protection degree	IP20
Mounting method	Din rail installation
Certification	TÜV CE CB

EPF-32-1P EPF-32-2P EPF-32-3P EPF-32-4P

EPF-32 Series Fuse Holder and Links

	Code NO.	Fuse link size	Link current	Packing unit (holder)	Packing unit(link)
 EPF-32-1P	EPF-32-1 EPF-32X-1	10X38mm	2A 4A 6A 10A 16A 20A 25A 32A	12	200
 EPF-32-2P	EPF-32-2 EPF-32X-2	10X38mm	2A 4A 6A 10A 16A 20A 25A 32A	6	200
 EPF-32-3P	EPF-32-3 EPF-32X-3	10X38mm	2A 4A 6A 10A 16A 20A 25A 32A	4	200
 EPF-32-4P	EPF-32-4 EPF-32X-4	10X38mm	2A 4A 6A 10A 16A 20A 25A 32A	3	200

EPF-63 Series Fuse Holder and Links

Standard	IEC 60947-3
Description	Fuse switch disconnector without null line
Number of Poles	1P,1P+N,2P,3P,3P+N
Fuse size	14X51
Rated operational current Ie	2-63A(AC 500V)/2-32A(AC 690V)
Rated operational voltage Ue(V)	AC 500/AC 690
Rated insulation voltage(V)	AC 800
Rated impulse withstand voltage(kV)	6
Conditional short-circuit current	100kA(AC 500V)/50kA(AC 690V)
Utilization category with fuse	g G
Protection degree	IP20
Mounting method	Din rail installation
Certification	CE

EPF-63-1P EPF-63-2P EPF-63-3P EPF-63-3P+N

EPF-63 Series Fuse Holder and Links

	Code NO.	Fuse link size	Link current	Packing unit (holder)	Packing unit(link)
 EPF-63-1P	EPF-63-1 EPF-63X-1	14X51mm	2A 4A 6A 8A 10A 12A 16A 20A 25A 32A 40A 50A 63A	12	100
 EPF-63-1P+N	EPF-63-1P+N EPF-63X-1P+N	14X51mm	2A 4A 6A 8A 10A 12A 16A 20A 25A 32A 40A 50A 63A	6	100
 EPF-63-2P	EPF-63-2 EPF-63X-2	14X51mm	2A 4A 6A 8A 10A 12A 16A 20A 25A 32A 40A 50A 63A	6	100
 EPF-63-3P	EPF-63-3 EPF-63X-3	14X51mm	2A 4A 6A 8A 10A 12A 16A 20A 25A 32A 40A 50A 63A	4	100
 EPF-63-3P+N	EPF-63-3P+N EPF-63X-3P+N	14X51mm	2A 4A 6A 8A 10A 12A 16A 20A 25A 32A 40A 50A 63A	3	100

EPF-125Series Fuse Holder and Links

Standard	IEC 60947-3
Description	Fuse switch disconnector without null line
Number of Poles	1P,1P+N,2P,3P,3P+N
Fuse size	22X58
Rated operational current Ie	10-125A(AC 500V)/10-50A(AC 690V)
Rated operational voltage Ue(V)	AC 500/AC 690
Rated insulation voltage(V)	AC 800
Rated impulse withstand voltage(kV)	6
Conditional short-circuit current	100kA(AC 500V)/50kA(AC 690V)
Utilization category with fuse	g G
Protection degree	IP20
Mounting method	Din rail installation
Certification	CE

EPF-125-1P EPF-125-2P EPF-125-3P EPF-125-3P+N

EPF-125 Series　　Fuse Holder and Links

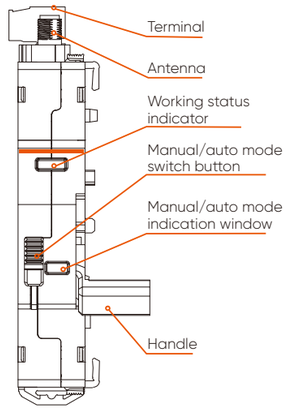
	Code NO.	Fuse link size	Link current	Packing unit (holder)	Packing unit(link)
 EPF-125 -1P	EPF-125-1 EPF-125X-1	22X58mm	10A 16A 20A 25A 32A 40A 50A 63A 80A 100A 125A	12	50
 EPF-125-1P+N	EPF-125-1P+N EPF-125X-1P+N	22X58mm	10A 16A 20A 25A 32A 40A 50A 63A 80A 100A 125A	6	50
 EPF-125-2P	EPF-125-2 EPF-125X-2	22X58mm	10A 16A 20A 25A 32A 40A 50A 63A 80A 100A 125A	6	50
 EPF-125-3P	EPF-125-3 EPF-125X-3	22X58mm	10A 16A 20A 25A 32A 40A 50A 63A 80A 100A 125A	4	50
 EPF-125-3P+N	EPF-125-3P+N EPF-125X-3P+N	22X58mm	10A 16A 20A 25A 32A 40A 50A 63A 80A 100A 125A	3	50

THE INTELLIGENT SM53RAi-W Series

1.1 Product Overview

Remote control device SM53RAi-W can match 1P-4P AC/DC circuit breaker, realize remotecontrol through external dry contact, and feedback the reclosing status through the signal outputport.

The red LED light indicates that the device is ON and in normal use. The green LED lightindicates that the device is in the OFF status. And the red LED flashes to indicate that the device isfaulty or manually open to enter the maintenance mode.The automatic control mode, manual mode and lock mode are optional through the toggleswitch on the control module panel.



Working Status Indicator	
Green Light On	Close
Green Light Flash Slowly	WLAN transmits data normally (in WiFi distribution mode)
Red Light on	Open
Red Light Flash Slowly	Abnormal WLAN connection (in WiFi distribution mode)

1.2 Specifications & Model

SM	53	RAi	-W		-	MCB	2P	C63
	Design Number	Device Type	Function Code	Power Supply Voltage		Adaptive Device	Poles	Current Specification
		Recloser	wifi	AC ver.: AC~230 V		Matis: MCB(MM50H)RCCB (ML50H)RCBO(MR50) Chint: NBl. Nader: NDB2 Schneider: IC65N		

Matis Circuit Breaker	Type	MCB	RCCB(AC)	RCBO(AC)
	Pole	1P,2P,3P,4P	2P,4P	1P,1P+N,2P,3P,3P+N,4P
	Trip Characteristics	B,C,D	B,C,D	B,C,D
	Rated Current	10,16,20,25, 32,40,50,63, 80,100,125	10,16,20,25, 32,40,50,63	10,16,20,25, 32,40,50,63

SM53RAi-W Series Electrical Characteristics

Standard	YDT 2346-2011
Minimum Voltage (minimum UE)	85% Ue
Maximum Voltage (maximum UE)	110% Ue
Applicable to Case Current of MCB (A)	63A 125A
Rated Voltage (Ue)	AC~220V
Poles	1P,2P,3P,4P
Rated impulse withstand voltage Uimp(kV)	4
Rated insulation voltage Ui(V)	500
Rated Frequency	50Hz
Maximum Operating Frequency	30open./h
Maximum Mechanical Durability	10000
Operation Life	20000
Working Current	0.6A (min) -1 (max)
Open Time	0.1s
Close Time	0.2s
Standby Power Consumption	<1.2W
Operating Temperature	-25℃ +55℃
Storage Temperature	-35℃ +65℃
Relative Humidity(non-condensing)	5%-95%
Protection Grade	IP20 (outside the cabinet) IP40 (inside the cabinet)

SM53RAi-W Series Electrical Characteristics

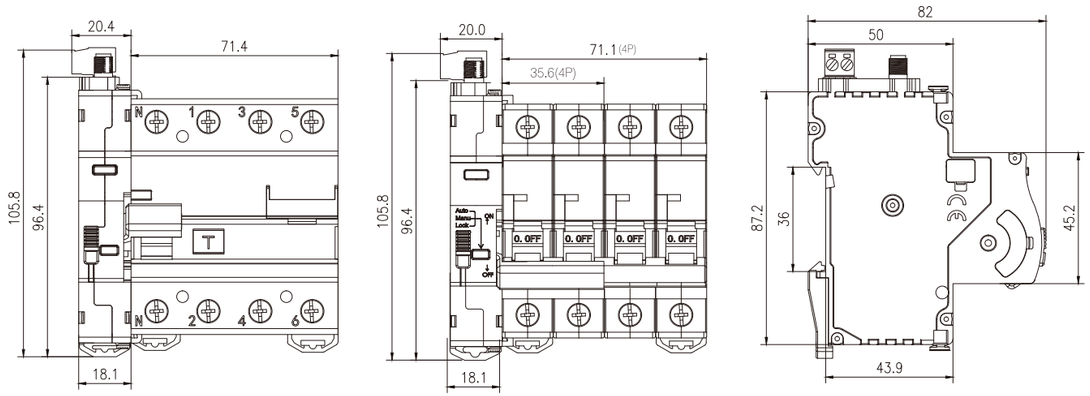
Features

·Ultra-small size: the minimum width is only 18mm, which is reduced by more than 1/2compared with similar devices at home and abroad;
·In conjunction with different brands of devices: the circuit breakers of ABB, Schneider.Nader, etc.;
·Reliable performance: Mechanical life is up to 20000 times, which is more than doublethat of domestic and foreign devices;
·Dperating quickly: compared with similar devices at home and abroad, the speed ismore than doubled;
·Multiple working modes: manual and automatic modes for option, physical lock of therecloser;
·Double fulcrum parallel drive to effectively ensure the reliable synchronous close of 3Pand above circuit breakers;
·Good fitness: DIN-rail side assembly;
·Energy saving and environmental protection, in line with RoHS requirements;
·Strong expandability: RS485 communication, dry contact control, and ON/OFF statusfeedback can be added.

Safety Lock Button(Table 1-2 the Description of the Button)

Name	Color	Status & Description
Working mode indication (safety lock button)	Auto	Auto: Automatic mode
	Manu	Manu: Manual mode
	Lock	Lock: Lock mode (padlock is required in this mode)

Dimensions



Technical Srevice

Anyone who purchases this remote control device SM53RAi-W enjoys a 24-month warrantyperiod from the date of purchase. During the warranty period, if the quality of the device itselfaffects the normal use, you can enjoy free repair and replacement, and the condition of paidservice as follows: the improper use, drop, installation and wiring errors that cause irreversibledamage. Besides, if you disassemble and modify the device yourself, you will not enjoy thewarranty service.

If you have any questions about the operation or malfunction of the device, please contact Matistechnical support service.

MR·BREAKER

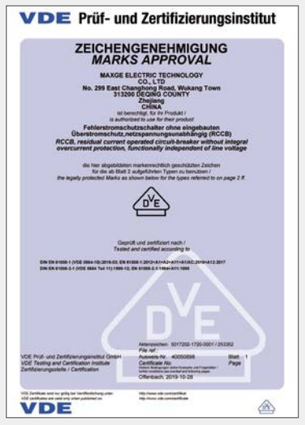
MAXGE

ISO-9001

ISO-14001

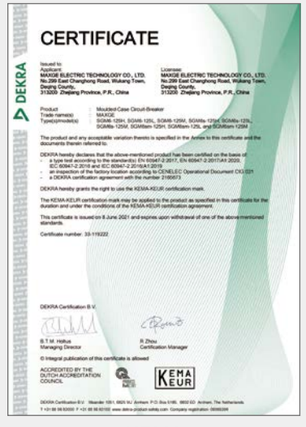
ISO-45001

VDE



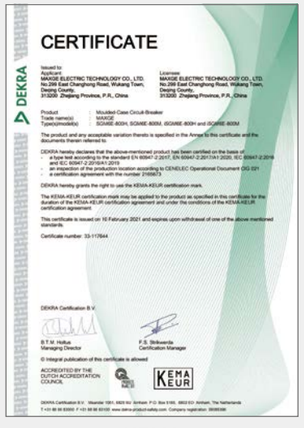
VDE

VDE



KEMA

KEMA



KEMA

TUV

TUV

TUV

SEMKO

SEMKO

SEMKO

ROHS

INMETRO

INMETRO