

SGRi Series Residual Current Circuit Breaker

Technical data

Standard	EN/ IEC61008-1
Rated conditional short-circuit current, I_{nc}	6kA, 10kA
Protection	Ground fault
Rated current, I_n	25,32,40,63,80, 100
Number of poles	2(1+N),4(3+N)pole
Rated sensitivity currents, $I_{\Delta n}$	10,30, 100,300mA
Rated residual non-operating current	0.5 X $I_{\Delta n}$
Rated impulse withstand voltage U_{imp}	4kV
Rated voltages	2pole 240 VAC 4pole 415 VAC
Ambient temperature (°C)	-25~+40,Max. 95%humidity
Residual current off-time at $I_{\Delta n}$	$\leq 0.1s$
Rated residual current making & breaking capacity, $I_{\Delta m}$	500A for $I_n=16,25,32,40A$ 630A for $I_n=63A$ 800A for $I_n=80A$ 1000A for $I_n=100A$
Type of trip	Electro-magnetic release
Type of terminal	Lug type and Pin type
Terminal capacity	Cables up to 35mm ²
Protection degree	IP20
Installation	35mm DIN rail



Intertek



SGRi-2P



SGRi-4P



SGRi RCD



SGRi-2P



SGRi-4P

Rated current(A)	I _{Δn}	Type AC 	Type A 	Packing unit
25	10mA	SGRi-2/25/10	SGRi-2/25/10-A	1
25		SGRi-2/25/30	SGRi-2/25/30-A	1
32		SGRi-2/32/30	SGRi-2/32/30-A	1
40		SGRi-2/40/30	SGRi-2/40/30-A	1
63	30mA	SGRi-2/63/30	SGRi-2/63/30-A	1
80		SGRi-2/80/30	SGRi-2/80/30-A	1
100		SGRi-2/100/30	SGRi-2/100/30-A	1
25		SGRi-2/25/100	SGRi-2/25/100-A	1
32		SGRi-2/32/100	SGRi-2/32/100-A	1
40		SGRi-2/40/100	SGRi-2/40/100-A	1
63	100mA	SGRi-2/63/100	SGRi-2/63/100-A	1
80		SGRi-2/80/100	SGRi-2/80/100-A	1
100		SGRi-2/100/100	SGRi-2/100/100-A	1
25		SGRi-2/25/300	SGRi-2/25/300-A	1
32		SGRi-2/32/300	SGRi-2/32/300-A	1
40		SGRi-2/40/300	SGRi-2/40/300-A	1
63	300mA	SGRi-2/63/300	SGRi-2/63/300-A	1
80		SGRi-2/80/300	SGRi-2/80/300-A	1
100		SGRi-2/100/300	SGRi-2/100/300-A	1
25	10mA	SGRi-4/25/10	SGRi-4/25/10-A	1
25		SGRi-4/25/30	SGRi-4/25/30-A	1
32		SGRi-4/32/30	SGRi-4/32/30-A	1
40		SGRi-4/40/30	SGRi-4/40/30-A	1
63	30mA	SGRi-4/63/30	SGRi-4/63/30-A	1
80		SGRi-4/80/30	SGRi-4/80/30-A	1
100		SGRi-4/100/30	SGRi-4/100/30-A	1
25		SGRi-4/25/100	SGRi-4/25/100-A	1
32		SGRi-4/32/100	SGRi-4/32/100-A	1
40		SGRi-4/40/100	SGRi-4/40/100-A	1
63	100mA	SGRi-4/63/100	SGRi-4/63/100-A	1
80		SGRi-4/80/100	SGRi-4/80/100-A	1
100		SGRi-4/100/100	SGRi-4/100/100-A	1
25		SGRi-4/25/300	SGRi-4/25/300-A	1
32		SGRi-4/32/300	SGRi-4/32/300-A	1
40		SGRi-4/40/300	SGRi-4/40/300-A	1
63	300mA	SGRi-4/63/300	SGRi-4/63/300-A	1
80		SGRi-4/80/300	SGRi-4/80/300-A	1
100		SGRi-4/100/300	SGRi-4/100/300-A	1

1. Life

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

2. Breaking time of residual current

Max.breaking time					
In(A)	I _{Δn} (A)	I _{Δn}	2I _{Δn}	5I _{Δn}	5A,10A,20A,50A,100A,200A,500A
25,32,40,63,80,100,125	0.01,0.03,0.1,0.3	0.1s	0.08s	0.04s	0.04s

3. 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)
25	4	2.5
32	6	2.5
40	10	2.5
63	16	2.5
80	25	2.5
100	35	2.5
125	35	2.5

4. 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

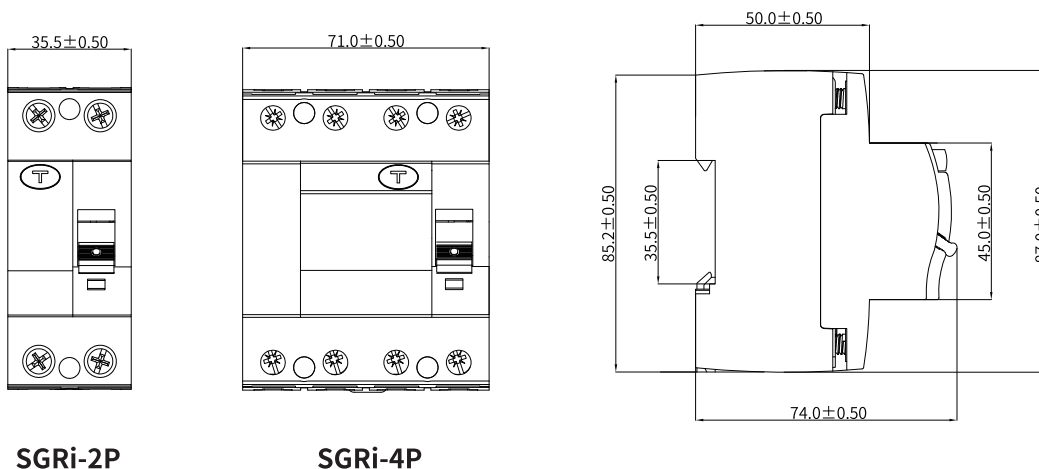
User-friendly connection of conductors and busbars

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)

5. Overall and mounting dimensions



SGRi-2P

SGRi-4P