

RI70J | DC

Miniature Circuit Breakers



Types

- RI71J single pole
- RI72J two pole
- RI73J three pole
- RI74J four pole

Benefits

- ▶ Used as DC protection for switchboards in PV systems
- ▶ Supports maximum system voltage up to 1200 VDC
- ▶ Short circuit, overload and surge protection



Technical data	Symbol	Unit	RI70J			
Standards			IEC/EN 60947-2			
Rated current	I_n	A	1, 2, 3, 4, 6, 10, 16, 20, 25, 32, 40, 50, 63			
Number of poles			1P	2P	3P	4P
Voltage	U_i	V	220/250	440/500	660/750	880/1000
Rated short-time making capacity (I _{cm}) – 6 kA		VDC	500	600	1500	1500
Rated short-time making capacity (I _{cm}) – 10 kA		VDC	300	600	1200	1200
Tripping characteristics			C			
Tripping type			thermal magnetic			
Rated impulse withstand voltage	U_{imp}	kV	6			
Electrical endurance			3000 cycles			
Mechanical endurance			10000 cycles			
Ambient temperature		°C	-20 ... +70			
IP degree			IP20			

RI70J – C characteristics

Type	Rated Current I_n (A)	Voltage U_i (V)	Number of Poles	Ordering No.	Weight (g)	Quantity / Box	Quantity / CTN
RI71J							
RI71J C1	1	220/250	1	786.091.422	121	12	120
RI71J C2	2	220/250	1	786.091.423	121	12	120
RI71J C3	3	220/250	1	786.091.424	121	12	120
RI71J C4	4	220/250	1	786.091.425	121	12	120
RI71J C6	6	220/250	1	786.091.426	118	12	120
RI71J C10	10	220/250	1	786.091.428	118	12	120
RI71J C16	16	220/250	1	786.091.430	118	12	120
RI71J C20	20	220/250	1	786.091.431	118	12	120
RI71J C25	25	220/250	1	786.091.432	118	12	120
RI71J C32	32	220/250	1	786.091.433	118	12	120
RI71J C40	40	220/250	1	786.091.434	118	12	120
RI71J C50	50	220/250	1	786.091.435	121	12	120
RI71J C63	63	220/250	1	786.091.436	121	12	120
RI72J							
RI72J C1	1	440/500	2	786.091.437	242	6	60
RI72J C2	2	440/500	2	786.091.438	242	6	60
RI72J C3	3	440/500	2	786.091.439	242	6	60
RI72J C4	4	440/500	2	786.091.440	242	6	60
RI72J C6	6	440/500	2	786.091.441	236	6	60
RI72J C10	10	440/500	2	786.091.443	236	6	60
RI72J C16	16	440/500	2	786.091.445	236	6	60
RI72J C20	20	440/500	2	786.091.446	236	6	60
RI72J C25	25	440/500	2	786.091.447	236	6	60
RI72J C32	32	440/500	2	786.091.448	236	6	60
RI72J C40	40	440/500	2	786.091.449	236	6	60
RI72J C50	50	440/500	2	786.091.450	242	6	60
RI72J C63	63	440/500	2	786.091.451	242	6	60
RI73J							
RI73J C1	1	660/750	3	786.091.452	362	4	40
RI73J C2	2	660/750	3	786.091.453	362	4	40
RI73J C3	3	660/750	3	786.091.454	362	4	40
RI73J C4	4	660/750	3	786.091.455	362	4	40
RI73J C6	6	660/750	3	786.091.456	354	4	40
RI73J C10	10	660/750	3	786.091.458	354	4	40
RI73J C16	16	660/750	3	786.091.460	354	4	40
RI73J C20	20	660/750	3	786.091.461	354	4	40
RI73J C25	25	660/750	3	786.091.462	354	4	40
RI73J C32	32	660/750	3	786.091.463	354	4	40
RI73J C40	40	660/750	3	786.091.464	354	4	40
RI73J C50	50	660/750	3	786.091.465	484	4	40
RI73J C63	63	660/750	3	786.091.466	484	4	40



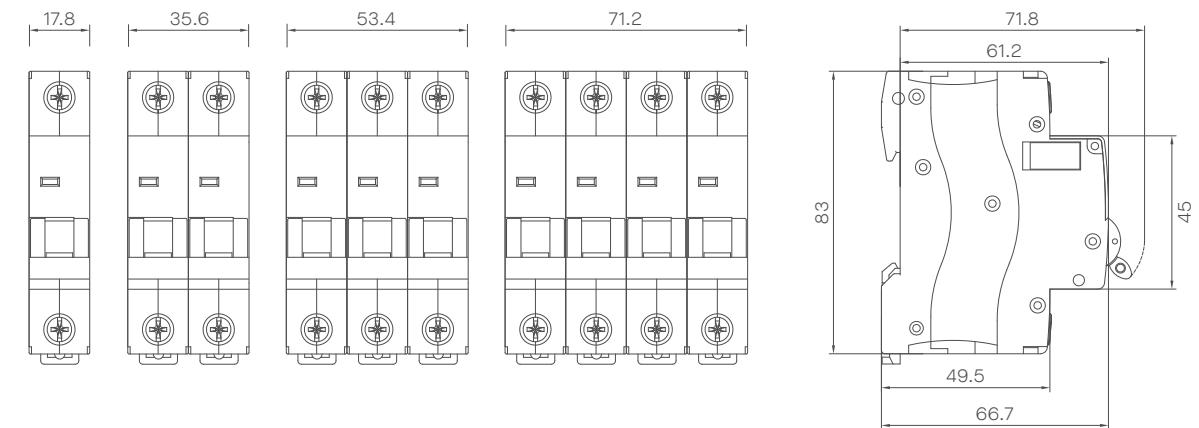
RI70J – C characteristics

Type	Rated Current I_n (A)	Voltage U_i (V)	Number of Poles	Ordering No.	Weight (g)	Quantity / Box	Quantity / CTN
RI74J							
RI74J C1	1	880/1000	4	786.091.467	482	3	30
RI74J C2	2	880/1000	4	786.091.468	482	3	30
RI74J C3	3	880/1000	4	786.091.469	482	3	30
RI74J C4	4	880/1000	4	786.091.470	482	3	30
RI74J C6	6	880/1000	4	786.091.471	468	3	30
RI74J C10	10	880/1000	4	786.091.473	468	3	30
RI74J C16	16	880/1000	4	786.091.475	468	3	30
RI74J C20	20	880/1000	4	786.091.476	468	3	30
RI74J C25	25	880/1000	4	786.091.477	468	3	30
RI74J C32	32	880/1000	4	786.091.478	468	3	30
RI74J C40	40	880/1000	4	786.091.479	468	3	30
RI74J C50	50	880/1000	4	786.091.480	482	3	30
RI74J C63	63	880/1000	4	786.091.481	482	3	30

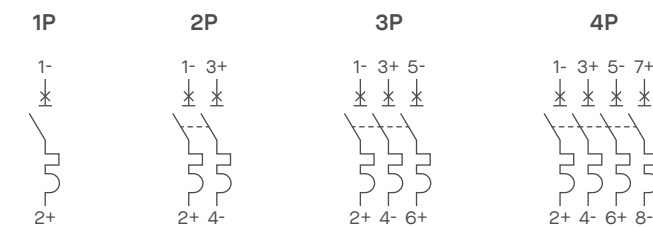


Dimensions

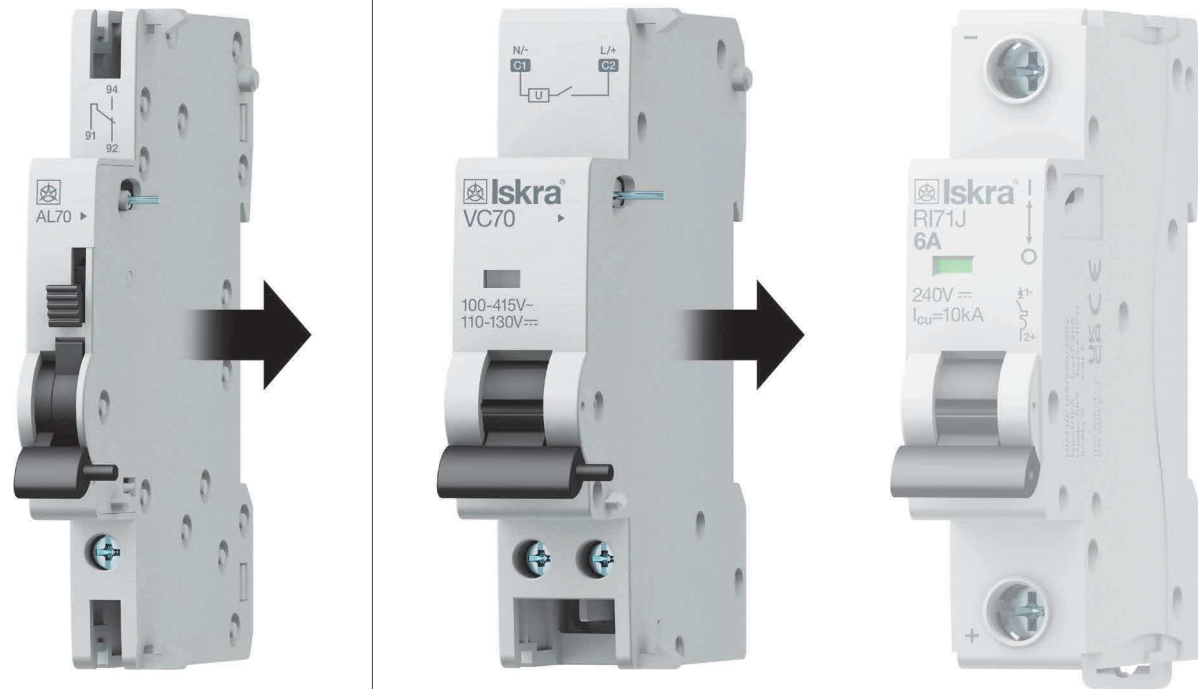
(mm)



Wiring diagram



Accessories for RI70



Types

- PS70-11 auxiliary contact
- AL70 alarm switch
- VC70 shunt release
- PC70 overvoltage and under-voltage release



PS70-11 Auxiliary Contact



Model	Symbol	Unit	Data
Rated current	I_n	A	3 A (400 VAC) 6 A (240 VAC) 1 A (110 VDC)
Terminal		mm ²	0.5 - 4
Dielectric strength		V/min	2000
Electro-mechanical endurance			≥ 5000 times
Ordering No.			786.091.488
Quantity / Box			10/100

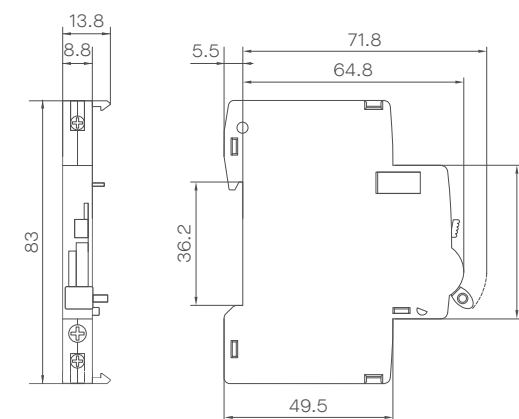
AL70 Alarm Switch



Model	Symbol	Unit	Data
Contact capacity	I_n	A	3 A (400VAC) 6 A (230VAC) 9 A (125VDC)
Rated power voltage	U_s	V	400, 230, 125
Operating voltage range	U_s		70 - 100 %
Dielectric strength		V/min	2000
Rated insulating voltage	U_i	V	500
Electro-mechanical endurance			≥ 4000 times
Ordering No.			786.091.489
Quantity / Box			10/100

Dimensions

(mm)



VC70
Shunt Release



PC70
Overvoltage and
undervoltage release



Model	Symbol	Unit	Data
Nominal voltage	U_n	VAC	110 ~ 415
Max inrush current	I_n		3 A (415 VAC)
			6 A (230 VAC)
			9 A (110 VAC)
Dielectric strength		V/1min	2000
Release range		VAC	110 ~ 415
Electro-mechanical endurance			≥ 4000 times
Ordering No.			786.091.490
Quantity / Box			10/100

Model	Symbol	Unit	Data
Rated voltage	U_e	VAC	230
Max tripping voltage		V	280
Min tripping voltage		VAC	170
Electro-mechanical endurance			≥ 4000 times
Ordering No.			786.091.491
Quantity / Box			10/100

Dimensions
(mm)

