

F200 – F670

Residual current devices



System pro M compact
Residual current devices
F200, F670 series



2 Pole

4 Pole

Description

RCDs provide ground fault equipment protection by monitoring the leakage of current to ground. The F200 and F670 series will trip when ground faults are detected in excess of the GF trip rating of the device. These devices provide GF protection only and are used in series with standard MCBs which provide overload and short circuit protection. The F200 and F670 series can be used as a main device providing GF protection for several MCB branch devices.

The F200 and F670 series are UL1053 recognized for use in 480Y/277VAC applications.

The F202 and F672 is for use in single phase/two wire or two wire systems. The F204 and F674 is for use in three phase/four wire systems.

The F200 and F670 series RCDs replace the F360, F370 and F660 series with no change in fit, form or function.

The F200 and F670 have a profile similar to the S2 MCBs and can be used with the MCB busbars.

F200 & F670



F202, F672



F204, F674

Residual current devices

Breaker	GF trip level	Rated current	Catalog number	List price	Delivery class	Suggested order qty	Wgt. oz (1 Pc.)	
F202 F672	Two pole 480Y/277VAC	10mA	16	F202AC-16/0.01	\$ 500	B	1	13.8
		30mA	25	F202AC-25/0.03	300			
			40	F202AC-40/0.03	400			
	63		F202AC-63/0.03	550				
	80		F672-80/0.03	1600				
	100		F672-100/0.03	2200				
	100mA		25	F202AC-25/0.1	300			
		40	F202AC-40/0.1	400				
		63	F202AC-63/0.1	550				
		80	F672-80/0.1	1600				
		100	F672-100/0.1	2200				
		300mA	25	F202AC-25/0.3	300			
	40		F202AC-40/0.3	400				
	63		F202AC-63/0.3	550				
	80		F672-80/0.3	1300				
100	F672-100/0.3		1800					
F204 F674	Four pole 480Y/277VAC		30mA	25	F204AC-25/0.03	350	B	1
		40		F204AC-40/0.03	450			
		63		F204AC-63/0.03	600			
		80		F674-80/0.03	1300			
		100		F674-100/0.03	1800			
		125		F674-125/0.03	1800			
		100mA		25	F204AC-25/0.1	350		
	40		F204AC-40/0.1	450				
	63		F204AC-63/0.1	600				
	80		F674-80/0.1	1300				
	100		F674-100/0.1	1800				
	125		F674-125/0.1	1800				
	300mA	25	F204AC-25/0.3	350				
		40	F204AC-40/0.3	450				
		63	F204AC-63/0.3	600				
		80	F674-80/0.3	1200				
		100	F674-100/0.3	1600				
		125	F674-125/0.3	1600				
		500mA	25	F204AC-25/0.5	450			
			40	F204AC-40/0.5	600			
	63		F204AC-63/0.5	650				

Above devices are UL 1053 recognized and IEC 1008 approved.

Delivery Class

- A - Standard item, stock to 2 weeks lead time
- B - Stock to 4 weeks lead time
- C - 6 to 8 week lead time

Accessories

F200 ①

System pro M
Residual current
devices



S2C-H6R



S2C-S/H6R



S2C-A_



S2C-UA_

Electrical accessories	For use on:	Catalog number	List price	Delivery class	Suggested order quantities	Wgt. oz. (1 pc.)
Auxiliary contacts						
For field mounting: right side Form C 1 NO/ 1 NC	F200	S2C-H6R	\$ 36	A	1	1.4

The auxiliary contacts will signal whether the breaker is in the ON or OFF position. The contacts are rated 2A/277 VAC and 1.5A/125 VDC. Minimum operating voltage is 24 VAC/VDC. Wire size: 18 AWG to 16 AWG.

Bell alarm

For field mounting, right side	F200	S2C-S/H6R	48	A	1	1.4
--------------------------------	------	-----------	-----------	---	---	-----

The bell alarm includes a set of contacts that will only signal when the breaker has tripped. Typically the contacts would be connected to an alarm or bell to signal the operator that an overcurrent trip has occurred. The bell alarm also includes a test button for testing the alarm contacts without opening the breaker. The contact is rated 2A/277 VAC and 1.5A/125 VDC. Minimum operating voltage is 24 VAC/VDC.

* Combination bell alarm/auxiliary contact

Shunt trip

For field mounting, right side A1: 12-60 VAC (12-60VDC) A2: 110-415 VAC (110-250 VDC)	F200	S2C-A1 S2C-A2	138	A	1	5.2
---	------	------------------	------------	---	---	-----

For remote tripping of breaker, a shunt trip device can be added to the MCB. The solenoid device opens the breaker after control voltage is applied. Shunt trips are available for on control system voltage (12-415 VAC/VDC).

Undervoltage release

For field mounting, right side 12 VDC 24 VAC 48 VAC 110 VAC 220 VAC 380 VAC	F200	S2C-UA12 S2C-UA24 S2C-UA48 S2C-UA110 S2C-UA230 S2C-UA400	216	A	1	5.2
---	------	---	------------	---	---	-----

When control voltage drops below approximately 50% of rated voltage, the UVR opens the breaker. The breaker can not be operated unless proper control voltage is first applied to the UVR coil. Similar in size and mounting to the shunt trip accessory.

Factory mounting

All accessories can be easily mounted in the field. For factory mounting of any accessory devices, add \$30 list to total price per breaker. To create complete catalog number, take suffix of accessory device following "S2C-" and add suffix to end of breaker part number. Multiple suffixes must be added in alphabetical order.

Delivery Class

- A** - Standard item, stock to 2 weeks lead time
- B** - Stock to 4 weeks lead time
- C** - 6 to 8 week lead time

① Please consult factory for F670 accessories.

Technical data

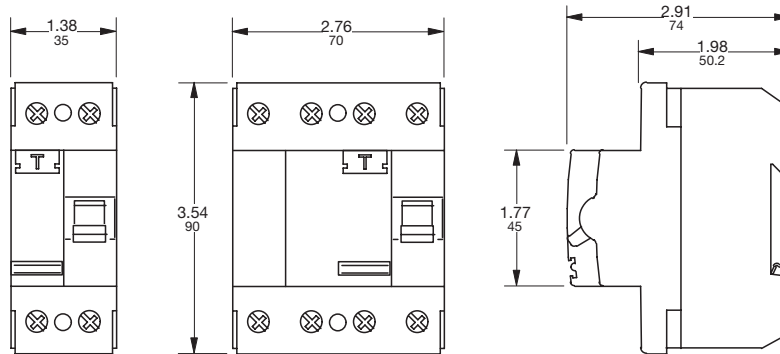
F200, F670

	F200AC	F670
Electrical features		
Standards	UL 1053 & IEC 61008	UL1053 & IEC 61008
Poles	2P, 4P	2P, 4P
Rated current In	16,25,40,63 AMPS	2P- 80,100 4P- 80,100,125
Rated Voltage Ui	480Y/277 VAC	480Y/277 VAC
Max operating voltage of circuit test	254 (440 for F200 left neutral)	254 (440 for left neutral)
Min operating voltage of circuit test	110 (195 for F200 left neutral)	110 (195 for left neutral)
Rated Frequency	50...60 Hz	50...60 Hz
Rated conditional	50...60 Hz	50...60 Hz
Short-circuit current	10 KA	10 KA
Rated residual breaking capacity	1 KA	2 KA
Rated impulse withstand voltage (1.2/50) Uimp	6 KV	6 KV
Power- frequency voltage dielectric strength	2.5 KV	2.5 KV
Surge current resistance acc. To VDE 0432 Part 2 (wave 8/20)	250 AMPS	250 AMPS
Mechanical features		
Toggle	Blue sealable in ON-OFF position	Blue sealable in ON-OFF position
Contact position indicator	yes	yes
Electrical Life	10000	10000
Mechanical life	20000	20000
Ambient temperature	-25°C... +55°C	-25°C... +55°C
Storage temp.	-40°C... +70°C	-40°C... +70°C
Installation		
Terminal Type	failsafe bidirectional cylinder-lift terminal at top and bottom (shock protected)	
Terminal size top/bottom per cable	6 AWG Max.	6 AWG Max.
Tightening torque	17.5 in-lb max.	17.5 in-lb max.
mounting	35mm din rail by means of fast clip	35mm din rail by means of fast clip
Connection	From top & bottom	From top & bottom
Withdraw from busbar	Possible without the use of tools	Possible without the use of tools
Approximate dimensions		
2 Pole mm	85x69x35 MM	85x69x35 MM
4 Pole mm	85x69x70 MM	85x69x70 MM
Weight		
2 Pole g	200g	200g
4 Pole g	350g	350g
Combination with auxiliary elements		
Auxiliary contact	yes	yes
signal contact/ auxiliary switch	yes	yes
shunt trip	yes	yes
undervoltage release	yes	yes

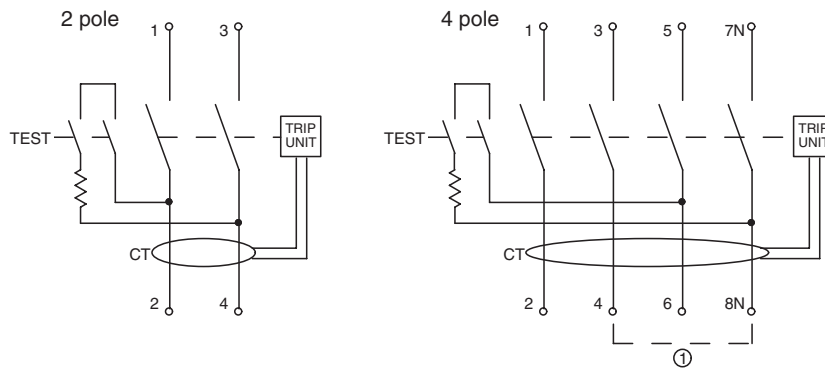
Approximate dimensions Circuit diagrams F200, F670

00.00 Inches
00.00 [Millimeters]

Approximate dimensions



Circuit diagrams



① To use on 3p/3w systems, add jumper between 4 and 8N for operation of test button.