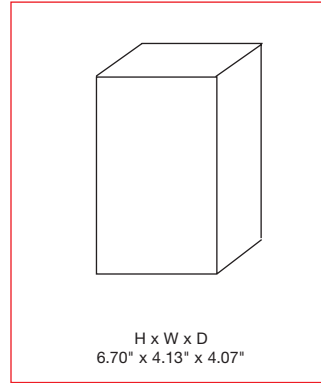


S3

S3

150A / 225A, 600VAC

Standard thermal-magnetic



Standard S3 package includes complete circuit breaker and mounting hardware. **Order cable lugs as a separate item.**

General

The S3 breaker family ranges from 15 through 225 amperes. The S3 trip mechanisms are non-interchangeable and use sensitive electromagnetic relays for overcurrent trip protection. Heat sensitive bimetals are used for thermal overcurrent protection. Short circuit current protection begins at 10 times the thermal rating of the breaker and uses a magnetic coil principle.

Versions

To meet all application needs, the S3 is available in various versions:

- T = Thermal-magnetic
- Q = 100% UL/CSA rated
- D = Molded case switch
- M = Magnetic only (MCP)

Performance level

Each version is also available in different maximum fault interrupting levels

- B = 240VAC
- N = Normal
- H = High
- L = Extra high

Number of poles

In UL/CSA form, the S3 is available in two pole or three pole versions, both with the same dimensions. A four pole version is also available in IEC form. For price estimate, add 35% to list price of selected version three pole breaker, contact ABB for details.

Accessory mounting

Internal accessories are UL/CSA approved for both factory or field installation. Accessories require control cable connectors. Shunt trips or UVR's mount in the left cavity. Auxiliary or bell alarm switches mount in the right cavity.

Reverse feeding

All versions of the S3 family are suitable for reverse feed applications.

Molded case switches

UL/CSA switches include no overcurrent protection except for a high instantaneous trip mechanism for self protection. IEC type molded case switches with no trip protection are also available.

UL/CSA Interrupting capacity (kA RMS) UL489 / CSA C22.2

Voltage	N	H	L
240VAC	65	100	150
480VAC	25	50	85 ^①
②600VAC	14	14	25
500VDC	35	50	65
600VDC	20	35	50
③S3/225A 500VDC	20	35	50

IEC-947 Interrupting capacity (kA RMS)

Voltage	N	H	L
230VAC	65	100	170
380/400/415VAC	35	65	85
440VAC	30	50	65
500VAC	25	40	50
690VAC	14	18	20
500VDC	35	50	65
750VDC	20	35	50

① 15-30A and 175-200-225A are 65kA at 480VAC

② S3 175A, 200A, 225A are rated 480VAC / 500VDC maximum

③ S3 175A, 200A, 225A

S3

150A / 225A, 600VAC

Standard thermal-magnetic

S3

S3B

Breaker	Ic at 240VAC	Rating	Magnetic trip	2 pole, 240VAC catalog number	List price	3 pole, 240VAC catalog number	List price
S3B	150kA	175A 200A 225A	1750A 2000A 2250A	S3B175TW-2 S3B200TW-2 S3B225TW-2		S3B175TW S3B200TW S3B225TW	

S3N

Breaker	Ic at 600VAC	Rating	Magnetic trip	2 pole, 480VAC/500VDC catalog number	List price	3 pole, 600VAC/600DC catalog number	List price
S3N	14kA	15A	500A	S3N015TW-2		S3N015TW	
		20A	500A	S3N020TW-2		S3N020TW	
		25A	500A	S3N025TW-2		S3N025TW	
		30A	500A	S3N030TW-2		S3N030TW	
		35A	500A	S3N035TW-2		S3N035TW	
		40A	500A	S3N040TW-2		S3N040TW	
		50A	500A	S3N050TW-2		S3N050TW	
		60A	600A	S3N060TW-2		S3N060TW	
		70A	700A	S3N070TW-2		S3N070TW	
		80A	800A	S3N080TW-2		S3N080TW	
		90A	900A	S3N090TW-2		S3N090TW	
		100A	1000A	S3N100TW-2		S3N100TW	
	Ic at 480VAC 25kA	175A ^①	1750A	S3N175TW-2		S3N175TW	
		200A ^①	2000A	S3N200TW-2		S3N200TW	
		225A ^①	2250A	S3N225TW-2		S3N225TW	

S3H

Breaker	Ic at 600VAC	Rating	Magnetic trip	2 pole, 480VAC/500VDC catalog number	List price	3 pole, 600VAC/600DC catalog number	List price
S3H	14kA	15A	500A	S3H015TW-2		S3H015TW	
		20A	500A	S3H020TW-2		S3H020TW	
		25A	500A	S3H025TW-2		S3H025TW	
		30A	500A	S3H030TW-2		S3H030TW	
		35A	500A	S3H035TW-2		S3H035TW	
		40A	500A	S3H040TW-2		S3H040TW	
		50A	500A	S3H050TW-2		S3H050TW	
		60A	600A	S3H060TW-2		S3H060TW	
		70A	700A	S3H070TW-2		S3H070TW	
		80A	800A	S3H080TW-2		S3H080TW	
		90A	900A	S3H090TW-2		S3H090TW	
		100A	1000A	S3H100TW-2		S3H100TW	
	Ic at 480VAC 50kA	175A ^①	1750A	S3H175TW-2		S3H175TW	
		200A ^①	2000A	S3H200TW-2		S3H200TW	
		225A ^①	2250A	S3H225TW-2		S3H225TW	

S3L

Breaker	Ic at 600VAC	Rating	Magnetic trip	2 pole, 480VAC/500VDC catalog number	List price	3 pole, 600VAC/600DC catalog number	List price
S3L	25kA	15A	500A	S3L015TW-2		S3L015TW	
		20A	500A	S3L020TW-2		S3L020TW	
		25A	500A	S3L025TW-2		S3L025TW	
		30A	500A	S3L030TW-2		S3L030TW	
		35A	500A	S3L035TW-2		S3L035TW	
		40A	500A	S3L040TW-2		S3L040TW	
		50A	500A	S3L050TW-2		S3L050TW	
		60A	600A	S3L060TW-2		S3L060TW	
		70A	700A	S3L070TW-2		S3L070TW	
		80A	800A	S3L080TW-2		S3L080TW	
		90A	900A	S3L090TW-2		S3L090TW	
		100A	1000A	S3L100TW-2		S3L100TW	
	Ic at 480VAC 65kA	175A ^①	1750A	S3L175TW-2		S3L175TW	
		200A ^①	2000A	S3L200TW-2		S3L200TW	
		225A ^①	2250A	S3L225TW-2		S3L225TW	

① 480VAC/500VDC maximum

S3

150A / 225A, 600VAC

Magnetic only MCPs & MCS

S3

Magnetic only (MCP)

Magnetic only circuit breakers are instantaneous trip only devices. MCPs must be used with some other device that will provide overload protection.

Type	Amps	Magnetic trip	3 pole, 600VAC catalog number	List price
S3L	3 5 10	12 – 36A 20 – 60A 40 – 120A	S3L003MW S3L005MW S3L010MW	
	25 ^③	100 – 300A	S3L025MW	
	50 100 125 150	200 – 600A 400 – 1200A 500 – 1500A 600 – 1500A	S3L050MW S3L100MW S3L125MW S3L150MW	
	200 ^②	800 – 2400A	S3L200MW	

Molded case switches

Type	Amps	Magnetic trip	3 pole, 600VAC/600VDC catalog number	List price
S3H-D	150 225 ^②	1500A 2250A	S3H150DW S3H225DW	
IEC switches (without overcurrent protection) Withstand rating: 6.5kA, 600VAC	100 160 250	none none none	S3D100W S3D160W S3D250W	

Connection options

Type	Wire range	Amps ^①	Set of 2 catalog number	List price	Set of 3 catalog number	List price
CU/AL front lugs	14AWG – 2AWG	60	K3TA-2		K3TA	
CU/AL front lugs	14AWG – 1/0	100	K4TB-2		K4TB	
CU/AL front lugs	2AWG – 4/0	150	K4TC-2		K4TC	
CU/AL front lugs	4AWG – 300kcmil	225	K4TD-2		K4TD	
CU front lugs (saddle)	14AWG – 250kcmil	250	—		Set of 6 catalog number	
					K4TES	
CU rear lugs	6AWG – 350kcmil	250	—		K4TER	
Extended front bar	—	250	—		K4ET-250	

^① Suggested lugs for circuit breaker up to amps shown. Cable size and type determine maximum amperage.

^② 480VAC / 500VDC maximum.

^③ Rated 3 pole, 600VAC/600VDC.