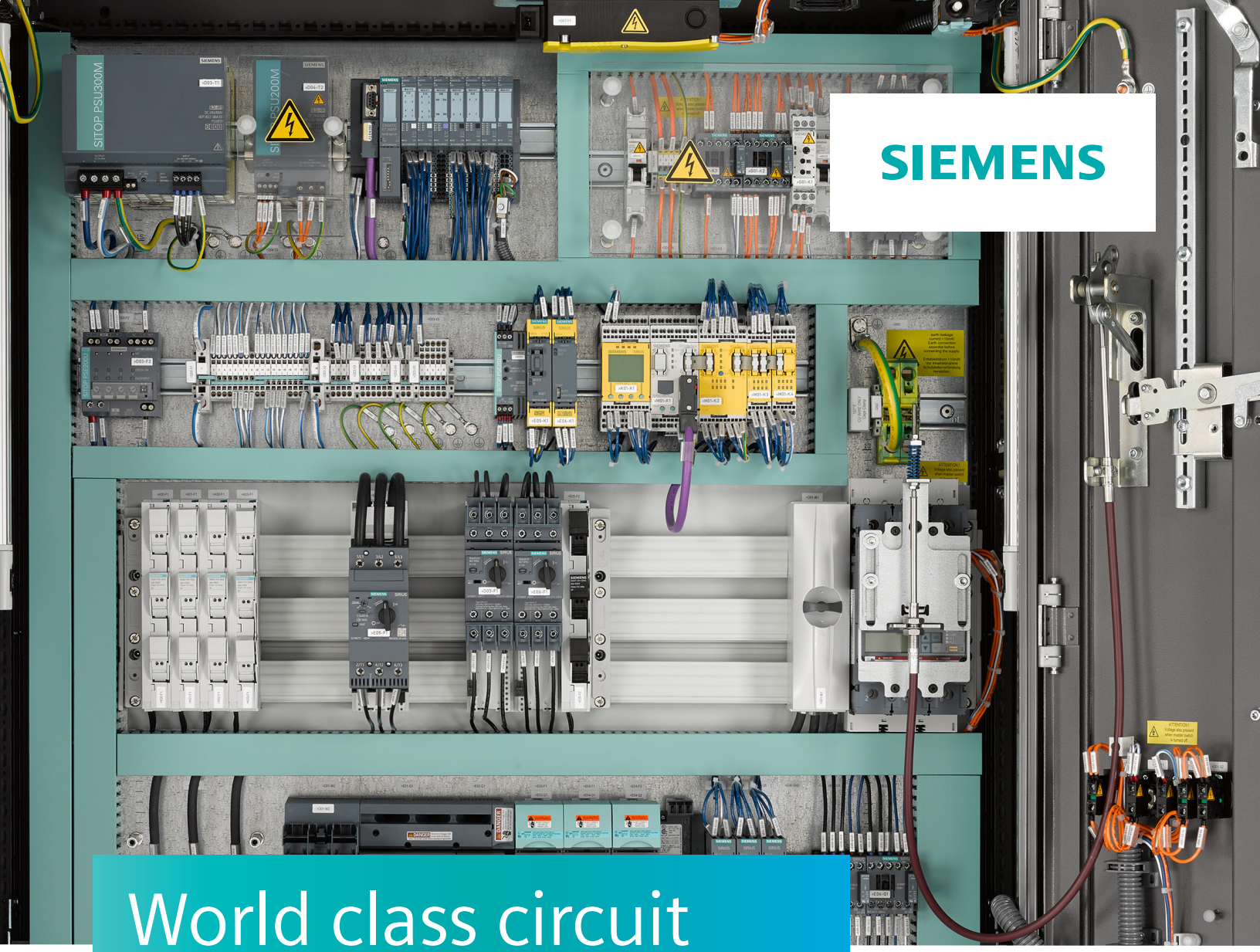


SIEMENS

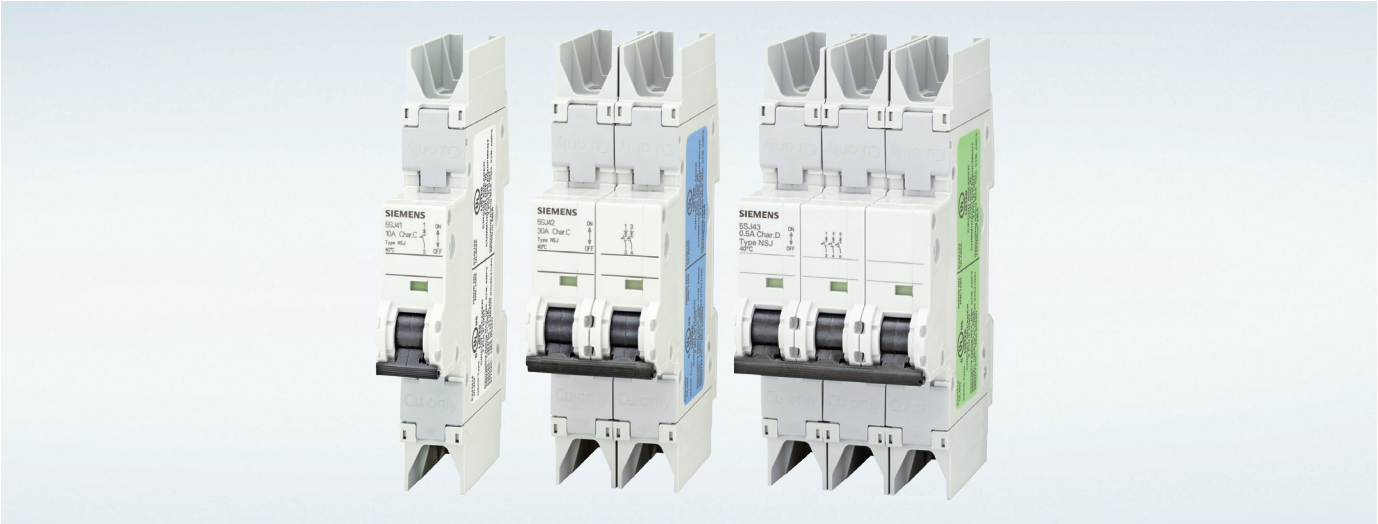
World class circuit protection

Protection devices for global applications.

The high quality 5S miniature circuit breakers are certified for use in the US and around the world.

When looking to expand your control panel, be sure to include Siemens circuit protection. By choosing Siemens 5S mini breakers, you can standardize your control panel design using one product family for all UL and global applications.

5SJ – UL489 branch circuit protectors



Product overview

Siemens 5SJ4 Miniature Circuit Breakers provide thermal-magnetic over-current protection and are intended for general industrial use as branch circuit or feeder protection. They are UL listed to UL 489, certified to Canadian standards CSA 22.2 No. 5.02, and CE marked to IEC/EN 60898 and IEC/EN 60497-2.

There are three device types:

Type	AC Voltage	Current	Number of Poles
5SJ4 ...-.HG40	240/120 V	0.3-63 A	1 (same polarity)
5SJ4 ...-.HG41	240 V	0.3-63 A	1, 2, 3
5SJ4 ...-.HG42	480Y/277 V	0.3-40 A	1, 2, 3

Accessories include UL listed auxiliary switches, fault signal contacts, shunt trips and a complete line of UL 489 busbar.

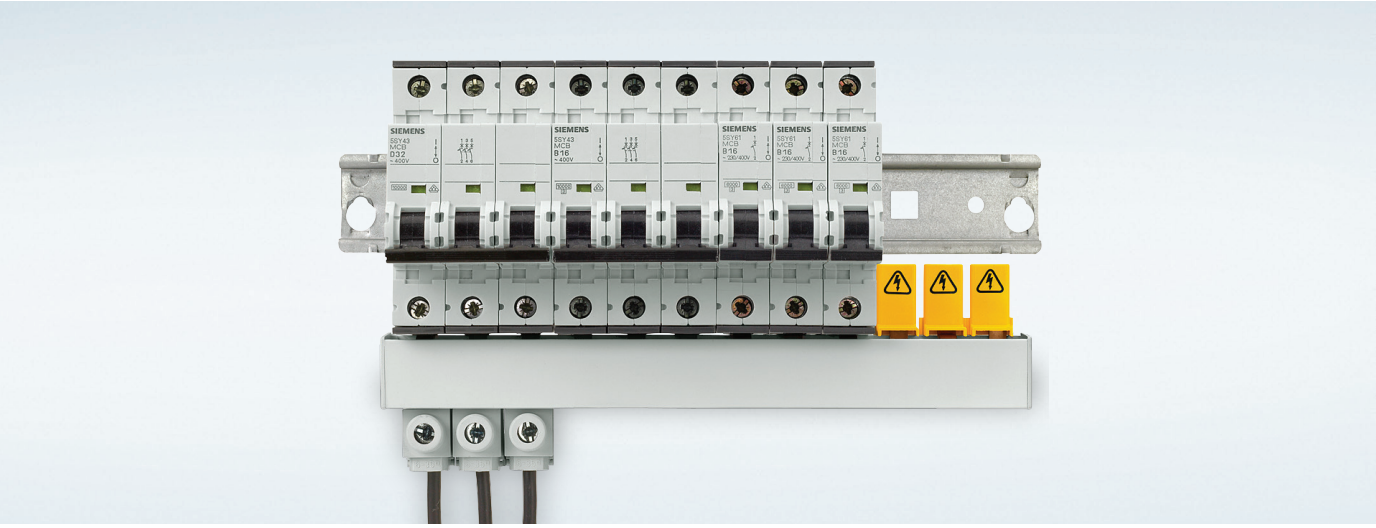
Key system features

- **Meets global standards** – For North American and export applications, the 5SJ4 MCBs meet UL, CSA and IEC standards for Circuit Breakers.
- **High AC interrupting ratings** – Up to 14 kA (Type HSJ) or 10 kA (Type NSJ) maximum RMS symmetrical amps and DC interrupting ratings of 10 kA.
- **Highest rated current** – Siemens offers higher current ratings with 0.3 to 63 A @ 240 VAC and 0.3 to 40 A @ 480Y/277 VAC.
- **Full voltage accessories** – Bus bars, terminal feeders, auxiliary and fault signal contacts are rated up to 480 VAC maximum, as standard.
- **Compact** – Smaller size than traditional Molded Case Circuit Breakers or fuse blocks.

Product features and benefits

- UL Listed for branch circuit and feeder protection
- Available with 1-, 2- or 3-poles for application flexibility
- Rated up to 240 VAC for the control circuit and 480Y/277 for the power circuit. This allows use on both sides of a control transformer.
- Available in the current range of 0.3 to 63A for load handling flexibility with offerings below 10 amps to meet smaller UL 489 applications
- Trip Curve options B, C and D meet varying load characteristics
- HACR-rated to meet heating and air conditioning industry requirements
- Touch safe design to ensure safe installation (IP20)
- Visible indicator for ON and OFF/Trip indication, even if the trip handle is held in place
- Standard 35 mm DIN rail mounting for ease of installation with other DIN rail compatible products

5SY – UL1077 supplementary protectors



Product overview

Siemens line of 5SY and 5SP circuit protection devices are intended for use as supplementary protectors per UL1077 and CSA 22.2 No. 235 and as circuit breakers per IEC/EN 60 947-2 and EN 60 898. Often used as a local disconnecting means inside the panel when a branch circuit protection device is already present, they allow users to quickly find the problem circuit without having to shut down all other circuits.

There are four device types:

Type	Current	Number of Poles
5SY4	0.3-63 A	1, 1+N, 2, 3, 3+N, 4*
5SY5	0.3-63 A	1, 2 for V > 60 V DC
5SY6	0.3-63 A	1, 1+N, 2, 3, 3+N, 4*
5SP4	80-125A	1, 2, 3, 4

Accessories include UL listed auxiliary switches, fault signal contacts, shunt trips, undervoltage trips, terminal cover caps, a handle locking device and both fixed length and cuttable busbar.

* The only difference between 5SY4 and 5SY6 is the IEC 60898-1 interrupting rating. 5SY4 has 10kA and 5SY6 has 6kA interrupting rating according to IEC 60898-1. However, UL interrupting ratings are the same for 5SY4 and 5SY6.

Key system features

- **Meets global standards** – For North American and export applications, the 5SY supplementary protectors meet UL, CAS and IEC standards with CE markings.
- **Full Trip Curve Coverage** – Main standard industry trip curves of Type A, B, C and D are fully covered and available for the 5SY product family to address various equipment protection.
- **Snap-on fixing system** – 5SY supplementary protectors feature a Snap-On fixing system, that can be reached from the front, without any tools, for quick and easy removal or repositioning.
- **Accessories are 480 VAC rated** – Bus bars, terminal feeders, auxiliary and fault signal contacts are rated up to 480 V AC maximum as standard.
- **5SY4** standard offering has the broadest number of variants in current ratings and trip curves.
- **5SY5** is specially designed for DC applications up to 500 VDC.
- **5SY6** is the lowest cost offering with the same UL ratings as 5SY4, but only available in B and C trip curves.

Product features and benefits

- Recognized as UL 1077 Supplementary Protectors to provide additional protection for more sensitive devices inside the panel
- Available with 1, 2, 3 or 4-poles or with 1 or 3-pole plus switched Neutral for application flexibility
- Wide product offering for amperage range from 0.3A to 125A for load handling flexibility
- Trip Curve options A, B, C and D meet varying load characteristics
- Touch safe protection to EN 50274-1 to ensure safe installation
- Visible indicator for ON and OFF/Trip indication, even if the trip handle is held in place
- Standard 35 mm DIN rail mounting for ease of installation with other DIN rail compatible products
- Installation flexibility with identical line and load dual wiring terminals for cable and

Common questions

"UL or CSA is challenging my use of Supplementary Protectors (UL 1077) in my application." – Typically the substitution of a like UL listed (UL 489) device will address this concern. For example, if you were using a 5SY4110-7 supplementary protector, the substitution of the appropriate 5SJ4110-7HG40, -7HG41 or -7HG42 would be acceptable.

"I need a global product" – Siemens lines of 5SJ4 miniature circuit breakers, 5SY & 5SP supplementary protectors, accessories and busbars meet UL, CSA and IEC standards. They carry UL, cUL and CE markings. It is important to note that some of the ratings and attributes vary to each standard (i.e. interruption rating).

"I need aux contacts and a shunt trip." – Fault and aux switches as well as shunt trips are available as side mounted accessories.

5S circuit protection guide

Catalog Series	5SY6	5SY4	5SY5	5SP	5SJ41...-.HG40	5SJ4....-.HG41	5SJ4....-.HG42
Certifications	UL Recognized to UL 1077				Listed to UL 489		
Rated AC Voltage	277 VAC (1-Pole) 480 VAC (2-, 3-, 4-Pole)				120 VAC, 240 VAC Same Polarity	240 VAC	480Y / 277 VAC
Rated DC Voltage	60 VDC		250 VDC (1-Pole) 500 VDC (2,3,4-Pole)	65 VDC (1-Pole) 125 VDC (2, 3, 4-Pole)	60 VDC	60 VDC (1-Pole) 125 VDC (2,3-Pole)	60 VDC (1-Pole) 125 VDC (2,3-Pole)
Number of Poles	1, 1+N, 2, 3, 3+N, 4		1, 2	1, 2, 3, 4	1	1, 2, 3	
Trip Characteristics	B, C	A, B, C, D	B, C	B, C, D	B, C, D	C, D	C, D
Rated current	0.3 to 63 A			80 to 125 A	B: 6 to 63 A C & D: 0.3 to 63 A		C: 0.3 to 40 A D: 0.3 to 32 A
Interrupting Ratings @ VAC	7.5 kA @ 240 VAC 14 kA @240 VAC (in pairs) 5 kA @ 277 VAC 5 kA @ 480 VAC		6 kA @ 277 VAC (1-Pole) 6 kA @480 VAC (2-Pole)	7.5 kA @ 240 VAC 14 kA @ 240 VAC (in pairs) 5 kA @ 277 VAC 5 kA @ 480 VAC	B: 14 kA (6 to 63 A) C: 14 kA (0.3 to 40 A), 10 kA (45 to 63 A) D: 14 kA (0.3 to 20 A), 10 kA (25 to 63 A)		C: 10 kA (0.3 to 40 A)[1)] D: 10 kA (0.3 to 32 A)[1)]
Interrupting Ratings @ VDC	3.5 kA @ 60 VDC		10 kA @ 250 VDC (1-Pole) 10 kA @ 500 VDC (2-Pole in series)	0.4 kA @ 65 VDC 0.6 kA @ 125 VDC	10 kA @ 60 VDC (1-Pole) 10 kA @ 125 VDC (2, 3-Pole)	10 kA @ 60 VDC (1-Pole) 10 kA @ 125 VDC (2, 3-Pole)	

1) At 240 VAC the Interrupting Rating is the same as 5SJ4...-.HG40 and HG41.

Useful information for 5SJ Circuit Breakers

Content	Description / Link	
Website	5SJ UL489 Miniature Circuit Breaker	Link
Video	Siemens 5SJ Miniature Circuit Breaker	View
Brochure	5SJ UL489 Miniature Circuit Breakers	PDF
Catalog	IC Section 16 – Control Circuit Protection	PDF

Useful information for 5SY & 5SP Supplementary Protectors

Content	Description / Link	
Website	5SY UL1077 Supplementary Circuit Breaker	Link
Video	Siemens 5SY Miniature Circuit Breaker	View
Brochure	5SY UL1077 Supplementary Protectors	PDF
Catalog	IC Section 16 – Control Circuit Protection	PDF

Published by
Siemens Industry, Inc. 2021.

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