

Circuit breakers for equipment (CBE) 5SY1

Protection for electronic equipment against overload and short circuits



Thermal-magnetic circuit breakers for equipment from Siemens offer optimal protection for any application in AC and DC control circuits in industry and plant engineering. They are deployed in mechanical engineering, in the chemical industry and power plant technology for the protection of solenoid valves, servo motors, signaling lights, right down to PLC inputs – anyplace where the objective is to precisely protect loads from overload and short circuits.

Order number overview

	Rated current [A]		Rated current [A]
MLFB	F1 curve	MLFB	F2 curve
5SY1705-2	0.5	5SY1705-4	0.5
5SY1701-2	1	5SY1701-4	1
5SY1702-2	2	5SY1702-4	2
5SY1704-2	4	5SY1704-4	4
5SY1706-2	6	5SY1706-4	6
5SY1708-2	8	5SY1708-4	8
5SY1710-2	10	5SY1710-4	10
5SY1716-2	16	5SY1716-4	16

Thermal magnetic circuit breakers for equipment trip both thermally and magnetically. Both systems, bi-metal and solenoid coils, operate independently from one another in one device.

Highlights

- Protection of sensitive electronic components, optimized for DC tripping up to 60 V
- Width 18 mm (1 MW) with integrated auxiliary switch 1 NO
- Screw terminal with field wiring class FW = 3 according to UL 1077
- Thermal tripping TC = 3 according to UL 1077
- Vibration-resistant according to EN 61737 Category 1, Class B → railway application

Main contact (rated switching capacity)

IEC 60934	3 kA	at 230 V AC
UL 1077 (SCCR = U3)	3.5 kA	at 60 V DC
	3 kA	at 277 V AC
	5 kA	at 120 V AC

Auxiliary contact

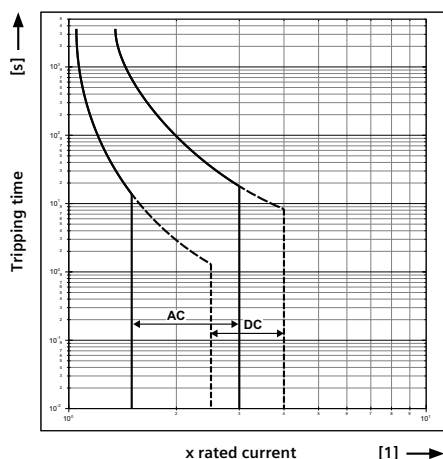
Rated values min. 24 V DC / 5 mA and max. 60 V DC / 1 A 13 DC according to IEC and 60 V DC / 6 A according to UL 1077

230 V AC / 6 A 14 AC according to IEC and 277 V AC / 1 A according to UL 1077

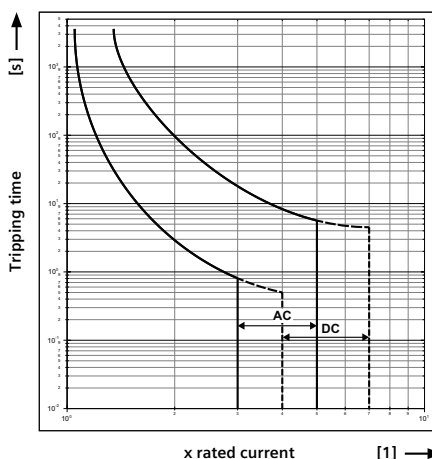
Tripping

DC tripping magnetic curve F1 → $2.5 \dots 4 \times I_n$ and curve F2 → $4 \dots 7 \times I_n$, thermal tripping is the same for both versions $1.05 \dots 1.35 \times$ rated current (I_n) (TC = 3).

Characteristic curve F1



Characteristic curve F2



Application example

