

Molded Case Circuit Breakers

Reference Guide

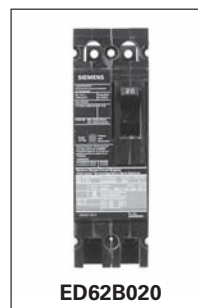
Selection/Application

Thermal-Magnetic Trip Breakers

					General Purpose Breakers														
					HGG	LGG	ED2	ED4	ED6	HED4	CED6								
Page					5-41	5-41	5-43	5-43	5-43	5-44	5-44								
Ratings	AC	Poles			1, 2, 3	1, 2, 3	1, 2, 3	1, 2, 3	1 ^① , 2, 3	1, 2, 3	2, 3								
		Amperes, Continuous			15–125	15–125	15–100	15–125	15–125 ^②	15–125	15–125								
		Volts 50/60HZ			1-Pole	347	347	120	277	347	277	—							
		Interrupt Rating Symmetrical RMS Amperes			2-Pole	600/347	600/347	240	480	600	480	600							
					3-Pole														
					120V								—	—	10,000	—	—	100,000	—
					240V								85,000	100,000	10,000	65,000	65,000	100,000 ^③	200,000
					277V								—	—	—	22,000 ^①	—	65,000 ^②	—
					347V								—	—	—	—	30,000	—	—
					480V								35,000	65,000	—	18,000	25,000	42,000	200,000
					600V								22,000 ^④	25,000 ^④	—	—	18,000	—	100,000
		IEC 947-2 50/60HZ			220/240V	lcu	—	—	—	—	65,000	—	—						
					lcs	—	—	—	—	17,000	—	—							
					380/415V	lcu	—	—	—	—	35,000	—	—						
					lcs	—	—	—	—	9,000	—	—							
					500V	lcu	—	—	—	—	18,000	—	—						
					lcs	—	—	—	—	5,000	—	—							
		DC	2-Pole, 250V DC Interrupting Ratings			35,000	42,000	5,000	30,000	30,000	30,000	30,000							
			3-Pole, 500V DC Interrupting Ratings ^⑤			—	—	—	—	18,000	—	50,000							
	Dimensions in inches	Height			1-Pole	5.40 1.00	5.40 1.00	6.34 1.00	6.34 1.00	6.34 1.00	6.34 1.00	9.26 —							
		Width			2-Pole	2.00	2.00	2.00	2.00	2.00	2.00	2.00							
					3-Pole	3.00	3.00	3.00	3.00	3.00	3.00	3.00							
					4-Pole	4.00	4.00	—	—	—	—	—							
Depth				2.90	2.90	4.00	4.00	4.00	4.00	4.00									
Overcurrent Devices	Thermal and Fixed Magnetic Trip			✓	✓	✓	✓	✓	✓	✓									
	Thermal and Adjustable Magnetic Trip			—	—	—	—	—	—	—									
	Adjustable Magnetic Trip only			—	—	—	—	✓	—	✓									
	Motor Circuit Protector																		
Molded Case Switch			—	—	✓	✓	✓	—	✓										
Accessories & Modifications	Undervoltage Trip			—	—	✓	✓	✓	✓	✓	✓								
	Shunt Trip			✓	✓	✓	✓	✓	✓	✓	✓								
	Auxiliary Switch			✓	✓	✓	✓	✓	✓	✓	✓								
	Alarm Switch			✓	✓	✓	✓	✓	✓	✓	✓								
	Mechanical Interlock			—	—	—	—	—	—	—	—								
	Rear Connection Studs			—	—	✓	✓	✓	✓	✓	✓								
	Electric Motor Operator			—	—	✓	✓	✓	✓	✓	✓								
	Plug-In Mounting Assembly (3 Pole Only)			—	—	✓	✓	✓	✓	✓	✓								
Fungus Proofing (ref. page 5-89)			✓	✓	✓	✓	✓	✓	✓	✓									
Individual Enclosures	Type 1 — Indoor Surface			✓	✓	✓	✓	✓	✓	✓	✓								
	Type 1 — Indoor, Flush			✓	✓	✓	✓	✓	✓	✓	✓								
	Type 3R — Outdoor-Rainproof			✓	✓	✓	✓	✓	✓	✓	✓								
	Type 12 — Lint, Fine Dust, Oils, Coolants			—	—	✓	✓	✓	✓	✓	✓								

For inches / millimeters conversion, see Technical section.

- ① 1-pole only.
- ② 35–100A: 25,000 AIR at 277V AC/15–30A: 65,000 AIR at 277V AC.
- ③ For DC UPS system application.
- ④ Single pole ED6 (15–30A) 30kA, (35–100A) 18 kA. CSA Only.
- ⑤ Single pole HED4, 15–30A: 65,000 AIR at 240V AC; single pole HED4, 35–100A: 25,000 AIR at 240V AC.
- ⑥ HGG and LGG breakers are rated at 600/347V.
- ⑦ ED6, 2-pole available 15–125 amps only.



Molded Case Circuit Breakers

ED 125A Frame Sentron Series

Selection

Ordering Instructions

- All ED Frame Sentron circuit breakers are supplied with load side lugs. If line side lugs are required, add "L" suffix to catalogue number. Consult Siemens sales office for any additional charge.
- 50°C Calibration, 400HZ - see page 5-67. All ED frame circuit breakers may be reverse connected.

Type ED2[®]

Blue Label

Continuous Current Rating @ 40°C	1-Pole		2-Pole		3-Pole
	120V AC	125V DC	240V AC	125V DC 250V DC	240V AC
	Catalogue Number		Catalogue Number		Catalogue Number
15	ED21B015 ^④		—		ED23B015
20	ED21B020 ^④		ED22B020		ED23B020
25	ED21B025		ED22B025		ED23B025
30	ED21B030		ED22B030		ED23B030
35	ED21B035		ED22B035		ED23B035
40	ED21B040		ED22B040		ED23B040
45	ED21B045		ED22B045		ED23B045
50	ED21B050		ED22B050		ED23B050
60	ED21B060		ED22B060		ED23B060
70	ED21B070		ED22B070		ED23B070
80	ED21B080		ED22B080		ED23B080
90	ED21B090		ED22B090		ED23B090
100	ED21B100		ED22B100		ED23B100

Shipping Weights

Number of Poles	Number per Carton	Shipping Weight (lbs.)
ED2, ED4, ED6, HED4		
1	30	38
2	10	25
3	10	38
CED6		
2	5	20
3	5	30

Lugs

Ampere Rating	No. of Poles	Catalogue Number	Wire Range
Aluminum Body Lugs			
All 15–25A	1, 2, 3	Line/Load SA1E025	#14–#10 Cu #12–#10 Al
All 30–100A	1, 2, 3	Line Side LN1E100	#10–1/0 Cu/Al
ED2, 4, CED6 30–60A	1	Load Side LD1E060	#10–#4 Cu/Al
ED2, 4, CED6 70–100A	1	Load Side LD1E100	#6–#1/0 Cu/Al
ED2, 4, 6, HED4 30–100A	2, 3	Load Side LN1E100	#10–1/0 Cu/Al
All 110, 125A	2, 3	Line/Load TA1E6125	#3–3/0 Cu #1–2/0 Al
Copper Body Lugs			
All 30–125A only	1, 2, 3	Line/Load TC1ED6150^③	#10–1/0 Cu
Compression Lugs			
All ED, CED		CCE125	2/0

Type ED4[®]

Blue Label

Continuous Current Rating @ 40°C	1-Pole		2-Pole		3-Pole
	120V AC 277V AC	125V DC	480V AC	250V DC	480V AC
	Catalogue Number		Catalogue Number		Catalogue Number
15	ED41B015 ^④		—		ED43B015
20	ED41B020 ^④		ED42B020		ED43B020
25	ED41B025		ED42B025		ED43B025
30	ED41B030		ED42B030		ED43B030
35	ED41B035		ED42B035		ED43B035
40	ED41B040		ED42B040		ED43B040
45	ED41B045		ED42B045		ED43B045
50	ED41B050		ED42B050		ED43B050
60	ED41B060		ED42B060		ED43B060
70	ED41B070		ED42B070		ED43B070
80	ED41B080		ED42B080		ED43B080
90	ED41B090		ED42B090		ED43B090
100	ED41B100		ED42B100		ED43B100
110	—		ED42B110		ED43B110
125	—		ED42B125		ED43B125

Type ED6[®]

Blue Label

Continuous Current Rating @ 40°C	1-Pole ^①	2-Pole		3-Pole	
	347V AC	600V AC	250V DC	600V AC	500V DC
	Catalogue Number	Catalogue Number		Catalogue Number	
15	ED61B015	—		ED63B015	
20	ED61B020	ED62B020		ED63B020	
25	ED61B025	ED62B025		ED63B025	
30	ED61B030	ED62B030		ED63B030	
35	ED61B035	ED62B035		ED63B035	
40	ED61B040	ED62B040		ED63B040	
45	ED61B045	ED62B045		ED63B045	
50	ED61B050	ED62B050		ED63B050	
60	ED61B060	—		ED63B060	
70	ED61B070	—		ED63B070	
80	ED61B080	—		ED63B080	
90	ED61B090	—		ED63B090	
100	ED61B100	—		ED63B100	
110	—	—		ED63B110	
125	—	—		ED63B125	

Note: ED frame circuit breakers qualified to UL 489 Supplement SB "Naval" — See page 5-79 for additional information

- ①CSA Certified only (Not UL)
- ②For CED types and all 110–125 ampere ED frames.
- ③See **Note: A**, page 5-64.
- ④SWD rated.
- ⑤HACR rated.

Modifications page 5-79
Accessories page 5-80