

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 catalog number. Consult Siemens sales office for any additional charge
- 50°C Calibration, 400HZ - see page 6-84. 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	
	Catalog Number	List Price \$	Catalog Number	List Price \$	Catalog Number	List Price \$
15	ED21B015 [Ⓢ]	125.00	ED22B015	288.00	ED23B015	428.00
20	ED21B020 [Ⓢ]	125.00	ED22B020	288.00	ED23B020	428.00
25	ED21B025	125.00	ED22B025	288.00	ED23B025	428.00
30	ED21B030	125.00	ED22B030	288.00	ED23B030	428.00
35	ED21B035	125.00	ED22B035	288.00	ED23B035	428.00
40	ED21B040	125.00	ED22B040	288.00	ED23B040	428.00
45	ED21B045	125.00	ED22B045	288.00	ED23B045	428.00
50	ED21B050	125.00	ED22B050	288.00	ED23B050	428.00
60	ED21B060	125.00	ED22B060	288.00	ED23B060	428.00
70	ED21B070	230.00	ED22B070	470.00	ED23B070	613.00
80	ED21B080	230.00	ED22B070	470.00	ED23B080	613.00
90	ED21B090	230.00	ED22B090	470.00	ED23B090	613.00
100	ED21B100	230.00	ED22B100	470.00	ED23B100	613.00

Shipping Weights

Number of Poles	Number per Carton	Shipping Weight (lbs.)
ED2, ED4, ED6, HED4, HHED6		
1	30	38
2	10	25
3	10	38
CED6		
2	5	20
3	5	30

Lugs

Ampere Rating	No. of Poles	Catalog 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, HHED6 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	1, 2, 3	Line/Load TC1ED6150 [Ⓢ]	#10-1/0 Cu only
Compression Lugs			
All ED, HHED, CED		CCE125	2/0

Enclosures (Neutral Included)

Type	Catalog Number	List Price \$
1 (Surface)	E2N1S (15-100A)	149.00
1 (Flush)	E2N1F (15-100A)	149.00
3R	E2N3R (15-100A)	410.00
4-4X	ED6SS4 (15-100A)	2841.00
7-9	EA (15-60A)	1750.00
7-9	EB (70-100A)	2176.00
12	E2N12 (15-100A)	254.00
1 (Surface)	CED6N1S [Ⓢ]	271.00
1 (Flush)	CED6N1F [Ⓢ]	271.00
3R	CED6N3R [Ⓢ]	725.00
12	CED6N12 [Ⓢ]	449.00

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	
	Catalog Number	List Price \$	Catalog Number	List Price \$	Catalog Number	List Price \$
15	ED41B015 [Ⓢ]	170.00	ED42B015	521.00	ED43B015	684.00
20	ED41B020 [Ⓢ]	170.00	ED42B020	521.00	ED43B020	684.00
25	ED41B025	170.00	ED42B025	521.00	ED43B025	684.00
30	ED41B030	170.00	ED42B030	521.00	ED43B030	684.00
35	ED41B035	170.00	ED42B035	521.00	ED43B035	684.00
40	ED41B040	170.00	ED42B040	521.00	ED43B040	684.00
45	ED41B045	170.00	ED42B045	521.00	ED43B045	684.00
50	ED41B050	170.00	ED42B050	521.00	ED43B050	684.00
60	ED41B060	170.00	ED42B060	521.00	ED43B060	684.00
70	ED41B070	289.00	ED42B070	686.00	ED43B070	804.00
80	ED41B080	289.00	ED42B080	686.00	ED43B080	804.00
90	ED41B090	289.00	ED42B090	686.00	ED43B090	804.00
100	ED41B100	289.00	ED42B100	686.00	ED43B100	804.00
110	—	—	ED42B110	1386.00	ED43B110	1594.00
125	—	—	ED42B125	1386.00	ED43B125	1594.00

Type ED6[Ⓢ]

Blue Label

Continuous Current Rating @ 40°C	1-Pole [Ⓢ]		2-Pole		3-Pole	
	347V AC		600V AC	250V DC	600V AC	500V DC
	Catalog Number	List Price \$	Catalog Number	List Price \$	Catalog Number	List Price \$
15	ED61B015	349.00	ED62B015	613.00	ED63B015	778.00
20	ED61B020	349.00	ED62B020	613.00	ED63B020	778.00
25	ED61B025	349.00	ED62B025	613.00	ED63B025	778.00
30	ED61B030	349.00	ED62B030	613.00	ED63B030	778.00
35	ED61B035	349.00	ED62B035	613.00	ED63B035	778.00
40	ED61B040	349.00	ED62B040	613.00	ED63B040	778.00
45	ED61B040	349.00	ED62B045	613.00	ED63B045	778.00
50	ED61B050	349.00	ED62B050	613.00	ED63B050	778.00
60	ED61B060	349.00	ED62B060	613.00	ED63B060	778.00
70	ED61B070	480.00	ED62B070	773.00	ED63B070	973.00
80	ED61B080	480.00	ED62B080	773.00	ED63B080	973.00
90	ED61B090	480.00	ED62B090	773.00	ED63B090	973.00
100	ED61B100	480.00	ED62B100	773.00	ED63B100	973.00
110	—	—	—	—	ED63B110	1872.00
125	—	—	—	—	ED63B125	1872.00

Note: ED frame circuit breakers qualified to UL 489 Supplement SB "Naval" — See page 6-84 for additional information

- Ⓢ CSA Certified only (Not UL)
- Ⓢ For CED types and all 110-125 ampere ED frames.
- Ⓢ See Note: A, page 6-81.
- Ⓢ SWD rated.
- Ⓢ HACR rated.

■ Built to order. Allow 2-3 weeks for delivery.

Modifications page 6-84
Enclosures Section 5
Accessories pages 6-36 and 6-86 to 6-91

Molded Case Circuit Breakers

ED 125A Frame Sentron Series

Selection/Dimensions

Type HED4[®]

Black Label

Continuous Current Rating @ 40°C	1-Pole		2-Pole		3-Pole	
	277V AC		125V DC		480V AC	
	250V DC	480V AC	250V DC	480V AC	250V DC	480V AC
	Catalog Number	List Price \$	Catalog Number	List Price \$	Catalog Number	List Price \$
15	HED41B015 [Ⓢ]	397.00	HED42B015	929.00	HED43B015	1140.00
20	HED41B020 [Ⓢ]	397.00	HED42B020	929.00	HED43B020	1140.00
25	HED41B025	397.00	HED42B025	929.00	HED43B025	1140.00
30	HED41B030	397.00	HED42B030	929.00	HED43B030	1140.00
35	HED41B035	397.00	HED42B035	929.00	HED43B035	1140.00
40	HED41B040	397.00	HED42B040	929.00	HED43B040	1140.00
45	HED41B045	397.00	HED42B045	929.00	HED43B045	1140.00
50	HED41B050	397.00	HED42B050	929.00	HED43B050	1140.00
60	HED41B060	397.00	HED42B060	929.00	HED43B060	1140.00
70	HED41B070	449.00	HED42B070	1070.00	HED43B070	1227.00
80	HED41B080	449.00	HED42B080	1070.00	HED43B080	1227.00
90	HED41B090	449.00	HED42B090	1070.00	HED43B090	1227.00
100	HED41B100	449.00	HED42B100	1070.00	HED43B100	1227.00
110	—	—	HED42B110	2176.00	HED43B110	2510.00
125	—	—	HED42B125	2176.00	HED43B125	2510.00

FIGURE 1 - ED, HED, HHED

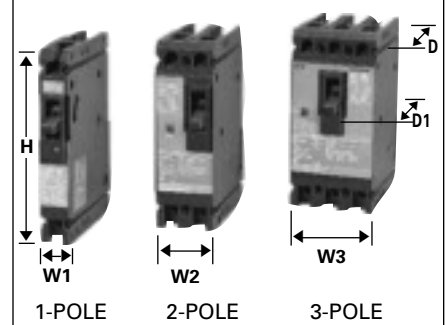
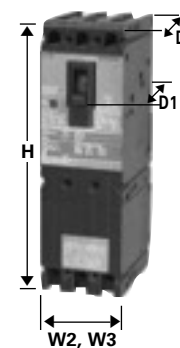


FIGURE 2 - CED (3-Pole shown)



Dimensions (in inches)

Breaker Type	W1	W2	W3	H	D	D1
Figure 1 ED2, ED4, ED6, HED4, ED6 ETI [®]	1	2	3	6.35	3.92	4.56
Figure 1 HHED6	—	2	3	6.53	3.92	4.56
Figure 2 CED6, CED6 ETI [®]	—	2	3	9.58	3.92	4.56

Type HHED6[®]

Black Label

Fuseless Current Limiting

Type CED6[®]

Red Label

Continuous Current Rating @ 40°C	2-Pole		3-Pole		2-Pole		3-Pole	
	600V AC		600V AC		600V AC, 250V DC		600V AC, 500V DC [Ⓢ]	
	Catalog Number	List Price \$	Catalog Number [Ⓢ]	List Price \$	Catalog Number	List Price \$	Catalog Number	List Price \$
15	HHED62B015	1010.00	HHED63B015A	1183.00	CED62B015	2756.00	CED63B015	3200.00
20	HHED62B020	1010.00	HHED63B020	1183.00	CED62B020	2756.00	CED63B020	3200.00
25	HHED62B025	1010.00	HHED63B025	1183.00	—	—	—	—
30	HHED62B030	1010.00	HHED63B030	1183.00	CED62B030	2756.00	CED63B030	3200.00
35	HHED62B035	1010.00	HHED63B035	1183.00	—	—	—	—
40	HHED62B040	1010.00	HHED63B040	1183.00	CED62B040	2756.00	CED63B040	3200.00
45	HHED62B045	1010.00	HHED63B045	1183.00	—	—	—	—
50	HHED62B050	1010.00	HHED63B050	1183.00	CED62B050	2756.00	CED63B050	3200.00
60	HHED62B060	1010.00	HHED63B060	1183.00	CED62B060	2756.00	CED63B060	3200.00
70	HHED62B070	1174.00	HHED63B070	1344.00	CED62B070	2756.00	CED63B070	3200.00
80	HHED62B080	1174.00	HHED63B080	1344.00	CED62B080	2756.00	CED63B080	3200.00
90	HHED62B090	1174.00	HHED63B090	1344.00	CED62B090	2756.00	CED63B090	3200.00
100	HHED62B100	1174.00	HHED63B100	1344.00	CED62B100	2756.00	CED63B100	3200.00
110	HHED62B110	2262.00	HHED63B110	2633.00	—	—	CED63B110	4885.00
125	HHED62B125	2262.00	HHED63B125	2633.00	CED62B125	4135.00	CED63B125	4885.00

Interrupting Ratings

Breaker Type	UL 489 AIR (File #E10848)									IEC 947-2						
	RMS Symmetrical Amperes (KA)									Volts AC (50/60Hz)						
	Volts AC									220/240			380/415		500	
	120	240	277	347	480	600	125	250	500 [Ⓢ]	Icu	Ics	Icu	Ics	Icu	Ics	
ED2 (1-P)	10	—	—	—	—	—	5	—	—	—	—	—	—	—	—	
ED2 (2, 3-P)	—	10	—	—	—	—	—	5 (2-P)	—	—	—	—	—	—	—	
ED4 (1-P)	65	—	22	—	—	—	30	—	—	—	—	—	—	—	—	
ED4 (2, 3-P)	—	65	—	—	18	—	—	30 (2-P)	—	—	—	—	—	—	—	
ED6 (1P)	—	—	—	30 [Ⓢ]	—	—	—	—	—	—	—	—	—	—	—	
ED6 (2, 3-P)	—	65	—	—	25	18	—	—	18 (3-P)	65	17	35	9	18	5	
HED4 (1-P)	100	—	65	—	—	—	30	—	—	—	—	—	—	—	—	
HED4 (1-P)	100	—	25	—	—	—	30	—	—	—	—	—	—	—	—	
HED4 (35-100A)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
HED4 (2, 3-P) [Ⓢ]	—	100	—	—	42	—	—	30 (2-P)	—	—	—	—	—	—	—	
HHED6 (2, 3-P) [Ⓢ]	—	100	—	—	65	18 [Ⓢ]	—	—	—	—	—	—	—	—	—	
CED6 (2, 3-P)	—	200	—	—	200	100	—	50 (2-P)	50 (3-P)	—	—	—	—	—	—	

■ Built to order. Allow 2-3 weeks for delivery.

Ⓢ SWD rated.

Ⓢ When wired as shown on page 6-3, this circuit breaker is UL listed and rated for use on 500V DC ungrounded UPS systems.

Ⓢ HED4 and HHED6 type circuit breakers meet the UL criteria for "current limiting" at 240V AC.

Ⓢ ED6-ETI, CED6-ETI, see page 6-66 for ordering information.

Ⓢ Single Pole 15-30A 30KA @ 347V non-UL. 35-100A 18KA @ 347V non-UL.

Ⓢ HACR rated.

Ⓢ HHED63B015A is rated 18KAIC at 600/347V.

Molded Case Circuit Breakers

Accessories

Selection

Accessories for:

ED 125A Frame



Combinations

Available only when ordered together. Only one module can be added to a breaker. Additional accessories, which always attach to the left pole, cannot be added to the combination later. Adds 1 inch pole space.

Equipment Ground Sensing

A field addable kit containing 30mA or 5 mA ground fault accessory module, current transformer with 24 inch leads, and current transformer mounting equipment. Current transformer to mount in gutter of lighting panel or any control panel. Accessory module operates from separate 120V control power source.

Both 30MA and 5MA devices are equipment protection devices only. Do not use for personnel protection.



Shunt Trip Combinations

Control Voltage		1 Shunt Trip	1 Shunt Trip and 1 Auxiliary Switch	1 Shunt Trip and 1 Auxiliary Switch and 1 Alarm Switch	1 Shunt Trip and 1 Alarm Switch	1 Shunt Trip and 2 Auxiliary Switches
AC	DC	Catalog Number	Catalog Number	Catalog Number	Catalog Number	Catalog Number
24		S17ED60	—	—	—	—
48		S18ED60	—	—	—	—
120		S01ED60	S01ED62A	S01ED62AB	S01ED62B	S01ED62AA
208		—	S02ED62A▲	S02ED62AB▲	S02ED62B▲	S02ED62AA▲
240		S03ED60	S03ED62A	S03ED62AB	S03ED62B▲	S03ED62AA▲
277		S15ED60▲	S15ED64A▲	S15ED64AB▲	S15ED64B▲	—
480		S04ED60	S04ED64A▲	S04ED64AB▲	S04ED64B▲	—
	12	S16ED60▲	S16ED62A▲	—	—	—
	24	S07ED60	S07ED62A	S07ED62AB▲	S07ED62B▲	S07ED62AA▲
	48	S09ED60	S09ED62A▲	S09ED62AB▲	S09ED62B▲	S09ED62AA▲
	125	S11ED60▲	S11ED62A▲	S11ED62AB▲	S11ED62B▲	S11ED62AA▲
	250	S13ED60▲	S13ED62A▲	S13ED62AB▲	S13ED62B▲	S13ED62AA▲
List Price \$:		636.00	897.00	1157.00	897.00	1157.00

Undervoltage Trip Combinations

Control Voltage		1 Undervoltage Trip	1 Undervoltage Trip and 1 Auxiliary Switch	1 Undervoltage Trip and 1 Auxiliary Switch and 1 Alarm Switch	1 Undervoltage Trip and 1 Alarm Switch	1 Undervoltage Trip and 2 Auxiliary Switches
AC	DC	Catalog Number	Catalog Number	Catalog Number	Catalog Number	Catalog Number
120		U01ED60	U01ED62A	U01ED62AB▲	U01ED62B▲	U01ED62AA▲
208		U02ED60▲	U02ED62A▲	U02ED62AB▲	U02ED62B▲	U02ED62AA▲
240		U03ED60	U03ED62A▲	U03ED62AB▲	U03ED62B▲	U03ED62AA▲
277		U16ED60▲	U16ED64A▲	U16ED64AB▲	U16ED64B▲	—
480		U06ED60	U06ED64A▲	U06ED64AB▲	U06ED64B▲	—
600		U08ED60▲	—	—	—	—
	24	U13ED60	U13ED62A▲	U13ED62AB▲	U13ED62B▲	U13ED62AA▲
	48	U14ED60▲	U14ED62A▲	U14ED62AB▲	U14ED62B▲	U14ED62AA▲
	125	U10ED60▲	U10ED62A▲	U10ED62AB▲	U10ED62B▲	U10ED62AA▲
	250	U12ED60▲	U12ED62A▲	—	—	U12ED62AA▲
List Price \$:		636.00	897.00	1157.00	897.00	1157.00

Auxiliary Switch Combinations

Maximum Voltage		1 Auxiliary Switch	1 Alarm Switch and 1 Auxiliary Switch	2 Auxiliary Switches	1 Alarm Switch and 2 Auxiliary Switches
AC	DC	Catalog Number	Catalog Number	Catalog Number	Catalog Number
240	250	A01ED62	A01ED62B	A02ED62	A02ED62B
480		A01ED64	A01ED64B	—	—
List Price \$:		271.00	540.00	540.00	802.00

Maximum Voltage		1 Auxiliary Switch	
AC	DC	Catalog Number	List Price \$
	12	A01EDLV	342.00
Gold Plated Contacts—for PLC use			

Alarm Switch Only

Maximum Voltage		1 Alarm Switch	
AC	DC	Catalog Number	List Price \$
240	250	B00ED62	271.00
480		B00ED64	271.00

Ground Fault Sensing Relay Kit — Equipment Protection Only

For Use With Breaker Frame	Number of Poles	Description	Catalog Number		List Price \$
			30mA	5mA	
CED6, ED2, ED4 ED6, EFC, EFF, HED4, HHED6	1, 2, 3	Basic Kit	GF01ED60	GF01ED65	1483.00
		Basic Kit with Normally Open Bell Alarm	GF01ED60B0	GF01ED65B0▲	1734.00
		Basic Kit with Normally Closed Bell Alarm	GF01ED60BC	GF01ED65BC▲	1734.00

▲ Built to order. Allow 6–8 weeks for delivery.