

# EH AND EHB Molded Case Circuit Breakers

CONTENTS			
Description	Class	Pages	
Application Data .....	652 .....	2-3	
Dimensions .....	652 .....	4	
Characteristic Tripping Curves .....	652 .....	5-8	



# EH AND EHB MOLDED CASE CIRCUIT BREAKERS

THERMAL-MAGNETIC  
APPLICATION DATA

**Description:** One, two and three pole thermal-magnetic circuit breakers. Molded unit case, 1" wide per pole, plug-on (EH) or bolt-on (EHB).

**Application:** EH and EHB circuit breakers mount in type NEHB panelboards, unit mounting bases or individual enclosures. All NEHB panelboards accept either plug-on or bolt-on circuit breakers. One pole circuit breakers are rated 277 volt, ac. maximum. Two and three pole circuit breakers are rated 480Y/277 volts, ac. maximum. 70-100 ampere two and three pole (bolt-on only) EHB breakers are available in ready-to-assemble or factory assembled NEHB panelboards. Two pole 70-100 ampere EHB breakers require four mounting spaces. Three pole 70-100 ampere breakers require six mounting spaces.

**Ratings:** EH and EHB circuit breakers are UL listed in File #E84967.

Branch Breaker	UL Listed Interrupting Rating RMS Symmetrical Amperes					Federal Specification W-C-375 B/GEN Class		
	Poles	Ampere Rating	AC Voltage					
			120	120/240	240		277	480Y/277
EH or EHB	1	15-30	65000	65000	65000	14000	14000	11a, 13a
	2	15-100	65000	65000	65000	14000	14000	13b, 15a
	3	15-100	65000	65000	65000	14000	14000	13b, 15b

**CATALOG NUMBERS •**

Amp. Rating	One Pole		Two Pole		Three Pole	
	Plug-On Cat. No.	Bolt-On Cat. No.	Plug-On Cat. No.	Bolt-On Cat. No.	Plug-On Cat. No.	Bolt-On Cat. No.
15	★EH14015	★EHB14015	EH24015	EHB24015	EH34015	EHB34015
20	★EH14020	★EHB14020	EH24020	EHB24020	EH34020	EHB34020
25	EH14025	EHB14025	EH24025	EHB24025	EH34025	EHB34025
30	EH14030	EHB14030	EH24030	EHB24030	EH34030	EHB34030
35	...	...	EH24035	EHB24035	EH34035	EHB34035
40	...	...	EH24040	EHB24040	EH34040	EHB34040
45	...	...	EH24045	EHB24045	EH34045	EHB34045
50	...	...	EH24050	EHB24050	EH34050	EHB34050
60	...	...	EH24060	EHB24060	EH34060	EHB34060
70	...	...	...	EHB24070	...	EHB34070
80	...	...	...	EHB24080	...	EHB34080
90	...	...	...	EHB24090	...	EHB34090
100	...	...	...	EHB24100	...	EHB34100

★ UL listed as SWD (switching duty) rated suitable for switching 277V. ac or 120V. ac fluorescent lighting loads.

• For key operated breakers, add K to Catalog Number. Example: EH24030K.

**Operating Mechanism:** Over-center, trip-free toggle operation with quick-make, quick-break action and positive handle indication. An integral crossbar assures simultaneous opening of all poles in multi-pole circuit breakers.

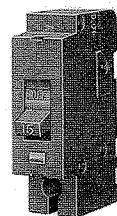
**Tripping Mechanism:** Thermal-magnetic type with individual elements in each pole, calibrated for 40° C ambient temperature.

**Tripping Indication:** When the circuit breaker is tripped, the handle assumes a center position between ON and OFF and the VISI-TRIP indicator appears in the window in the breaker case. The circuit breaker can be reset by pushing the handle to the extreme OFF position and then to the ON position.

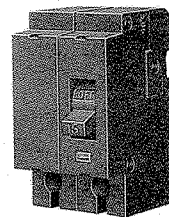
**Terminations:** EH and EHB circuit breakers accept the following wire sizes:

Ampere Rating ★	Wire Sizes (AWG)		Number of Wires Per Pole
	Aluminum	Copper	
15-30	(2) #12-#8	(2) #14-#8	1 or 2
40-60	#12-#2	#14-#2	1
70-100	#4-2/0	#4-2/0	1

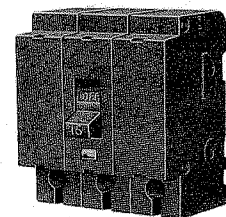
★ 15-30 ampere circuit breakers are suitable for use with 60°C or 75°C conductors. 35-60 ampere breakers are suitable for use with 75°C conductors.



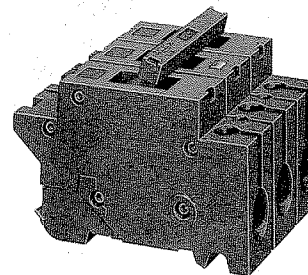
1-POLE



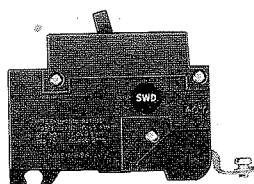
2-POLE



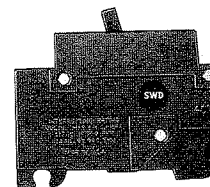
3-POLE



3-POLE  
100 AMPERE



BOLT-ON



PLUG-ON

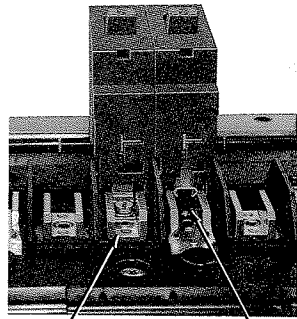
VISI-TRIP is a Registered Trademark of Square D Company.



# EH AND EHB MOLDED CASE CIRCUIT BREAKERS

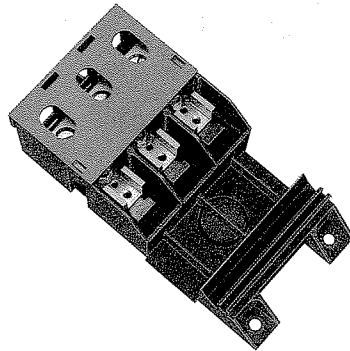
## THERMAL-MAGNETIC APPLICATION DATA

CLASS  
**652**



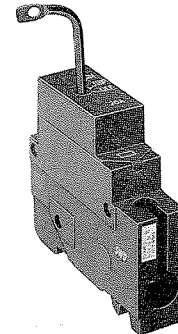
Bolt-On Connection                      Plug-On Connection

**Panelboard Mounting:** Any NEHB panelboard interior accepts either plug-on EH or bolt-on EHB circuit breakers. Heavy plated branch connectors provide "blow-on" (increased contact pressure under high fault conditions) plug-on connections and tapped mounting holes for bolt-on breakers. Refer to Catalog Class 1660.



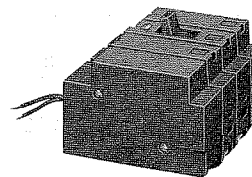
**Unit Mounting:** Unit mounting base (Catalog No. EHN3CL) accepts 15-30A. one pole or 15-100A. two and three pole EH or EHB circuit breakers. Lugs for #14-2/0 Cu or #12-2/0 A1 wire are provided.

**Key Operated:** The key operated circuit breaker provides a greater measure of security than handle lock-off attachments. It is turned ON, OFF or to the RESET position with a special key included with the breaker. Trip indication is provided by the VISI-TRIP indicator. Key operated EH or EHB breakers are available in one, two and three pole construction and can be mounted in any space which will accept a standard EH/EHB circuit breaker. Key operators are UL listed and available on 15-30A. 1-pole and 15-60A. 2 or 3-pole EH and EHB circuit breakers.

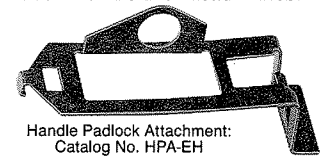


EH 1-POLE  
WITH KEY OPERATOR

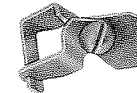
**Accessories:** EH/EHB circuit breakers are available with factory assembled accessories. Available accessories include shunt trip, alarm switch, and auxiliary switches. When accessories are added to EH/EHB circuit breakers, an additional pole space is required. Combinations of more than one accessory must be ordered by description. All accessory devices are provided with 18 inch lead wires.



EH With Shunt Trip



Handle Padlock Attachment:  
Catalog No. HPA-EH



Handle Lockoff:  
Catalog No. HLO-EH

### ACCESSORIES

Electrical Accessory	Symbol	Description	Volts	Coil Burden▲ VA	Catalog Suffix
SHUNT TRIP		Used for tripping the circuit breaker electrically using remote control source, 50/60 Hz.	12 ac/dc	60	1042
			24 ac/dc	168	
AUXILIARY SWITCH 1A and 1B	Breaker Closed	"A" contact opens when breaker is OFF or TRIPPED. "B" contact closed when breaker is OFF or TRIPPED. 277V. ac max. 50/60 Hz. — 5A. Color Code: Yellow leads for "A" contacts. Blue leads for "B" contact. Striped leads for common.	120 ac	72	1212
			208 ac	228	
ALARM SWITCH	Breaker Tripped	One contact only, closed when breaker is TRIPPED. 5A. max. at 120V. ac, 50/60 Hz.	240 ac	288	
			277 ac	416	
	Breaker Open or Closed			2100	

▲ A minimum 50 VA supply transformer is recommended for any shunt trip accessory.

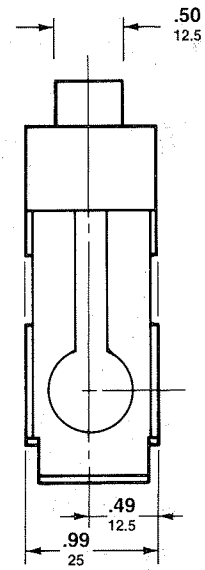
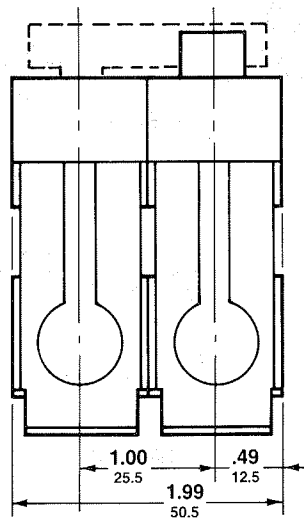
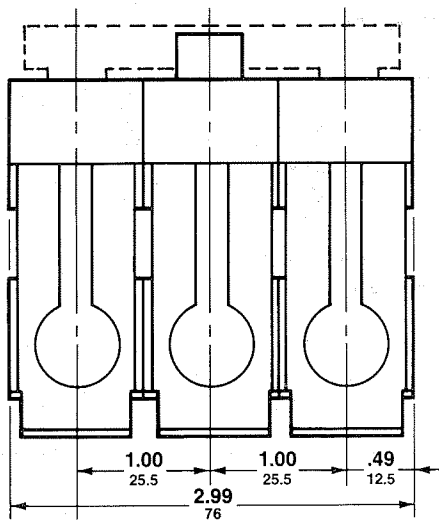
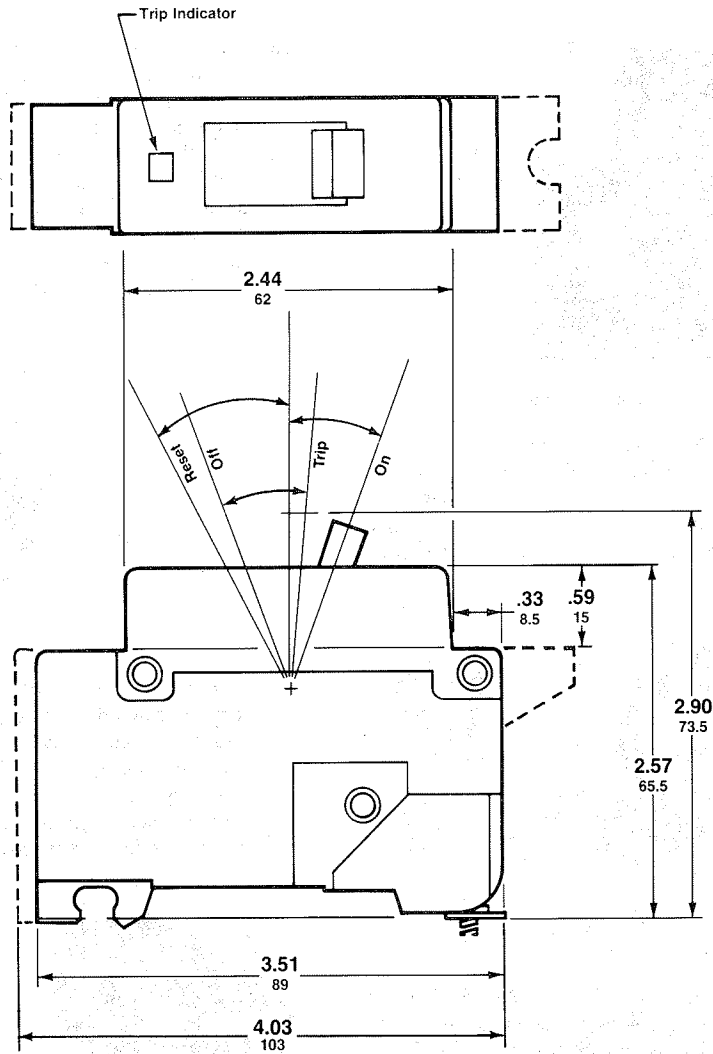
Accessory Description	Amperage	Poles	Catalog Suffix
Handle Lock-Off	15-60	1, 2, 3	HLOEH
Handle Padlock Attachment	All	1, 2, 3	HPAEH

VISI-TRIP is a Registered Trademark of Square D Company.



# EH AND EHB MOLDED CASE CIRCUIT BREAKERS

DIMENSIONS



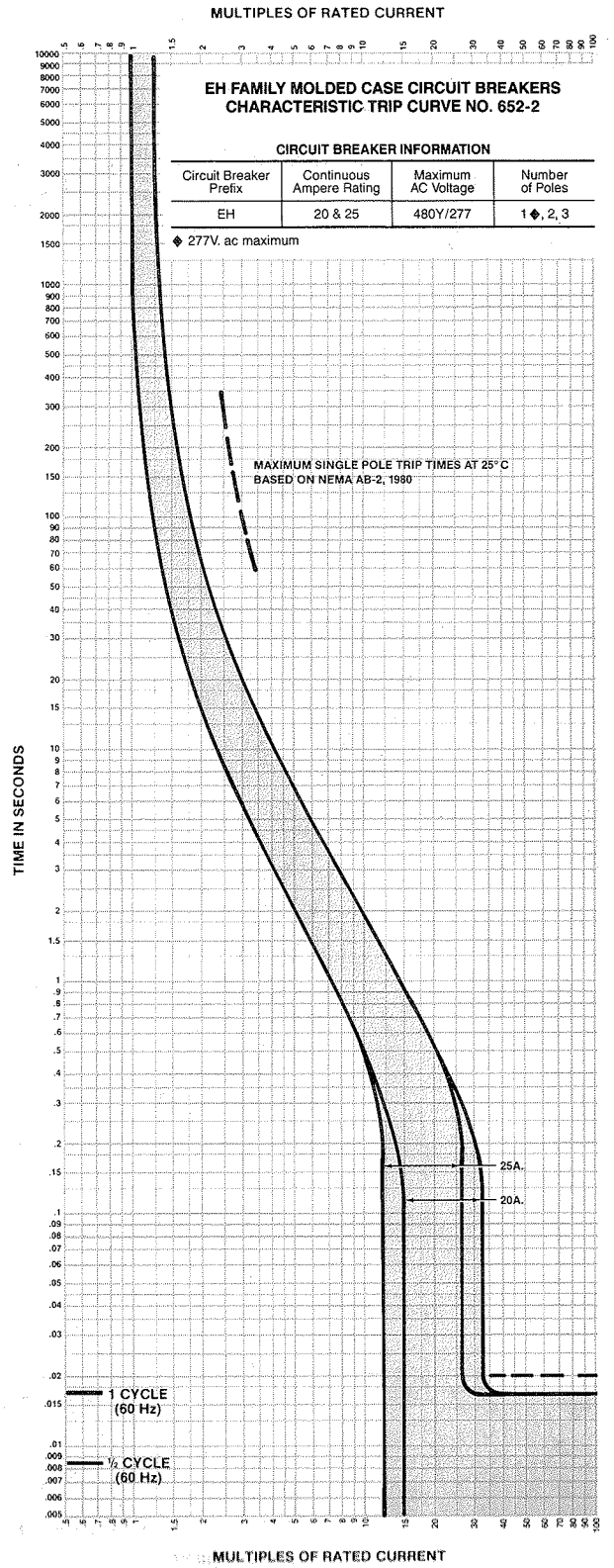
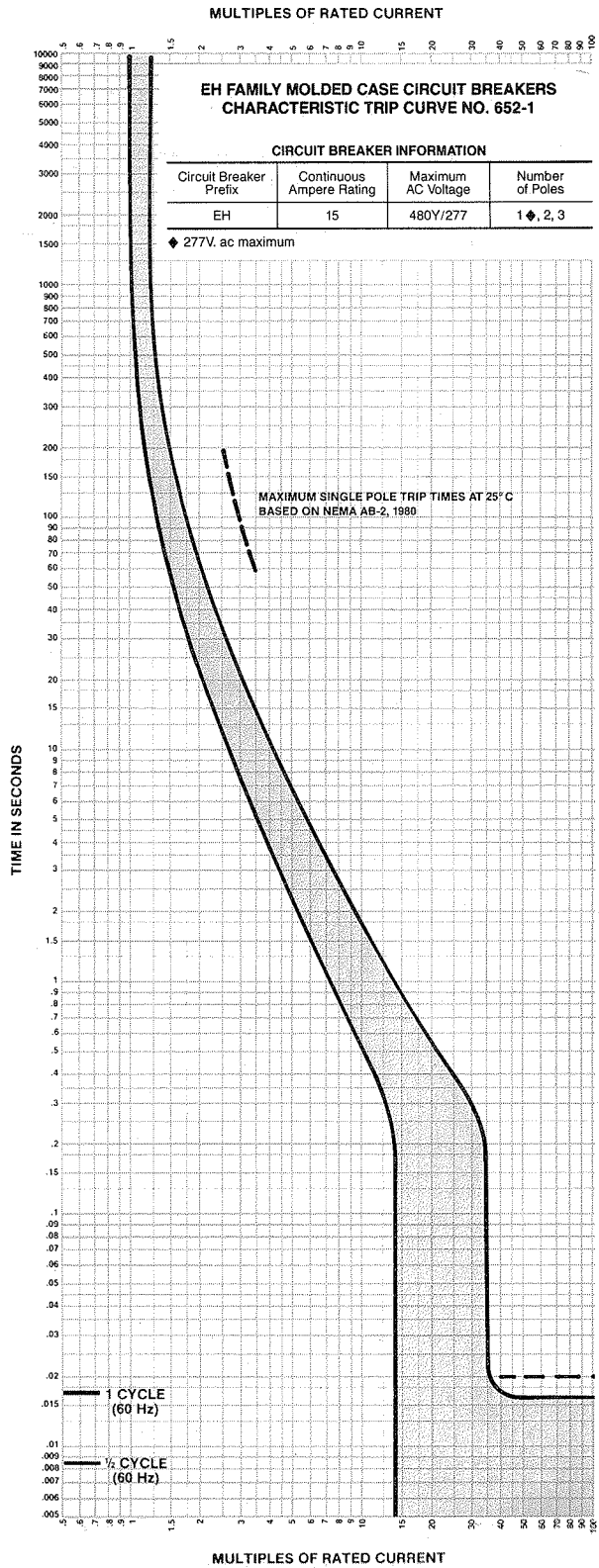
Dashed line applies only to 70-100A. EHB breakers.

Dual Dimensions: **INCHES**  
Millimeters



# EH AND EHB MOLDED CASE CIRCUIT BREAKERS CHARACTERISTIC TRIPPING CURVES

CLASS  
**652**

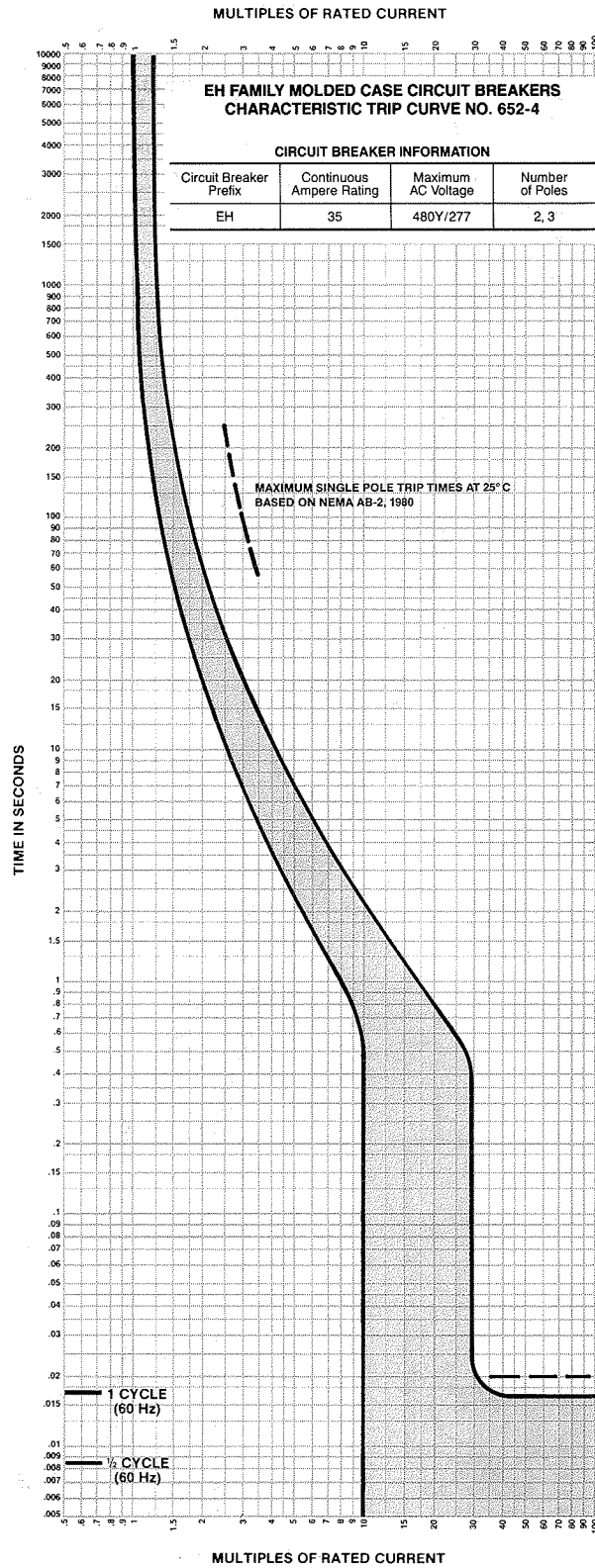
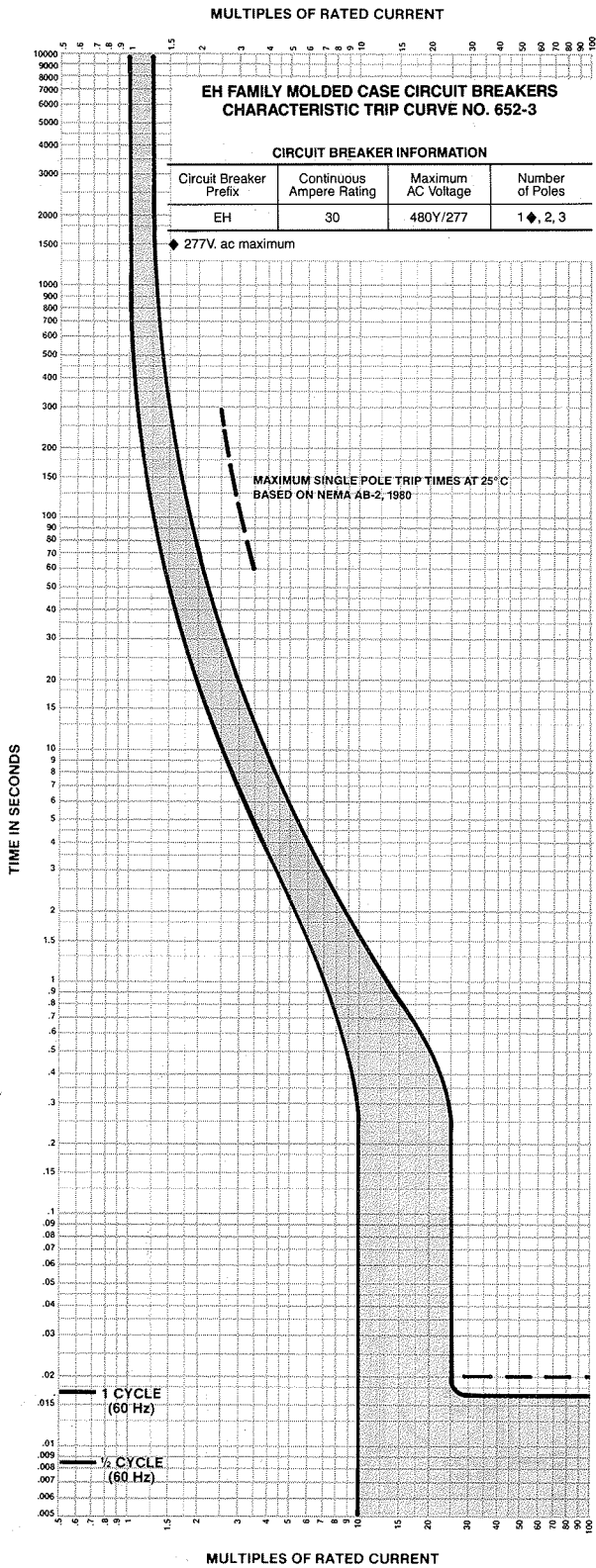


All curves available on tissue stock as a set for coordination studies



# EH AND EHB MOLDED CASE CIRCUIT BREAKERS

## CHARACTERISTIC TRIPPING CURVES



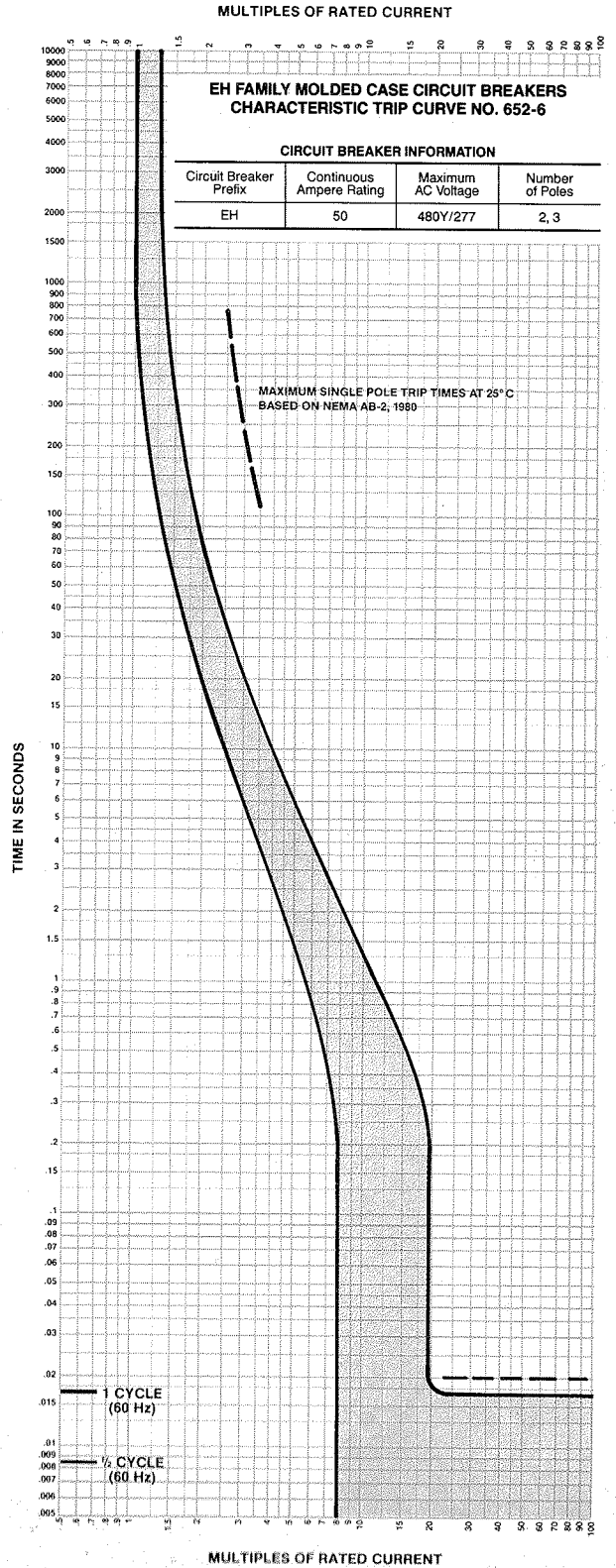
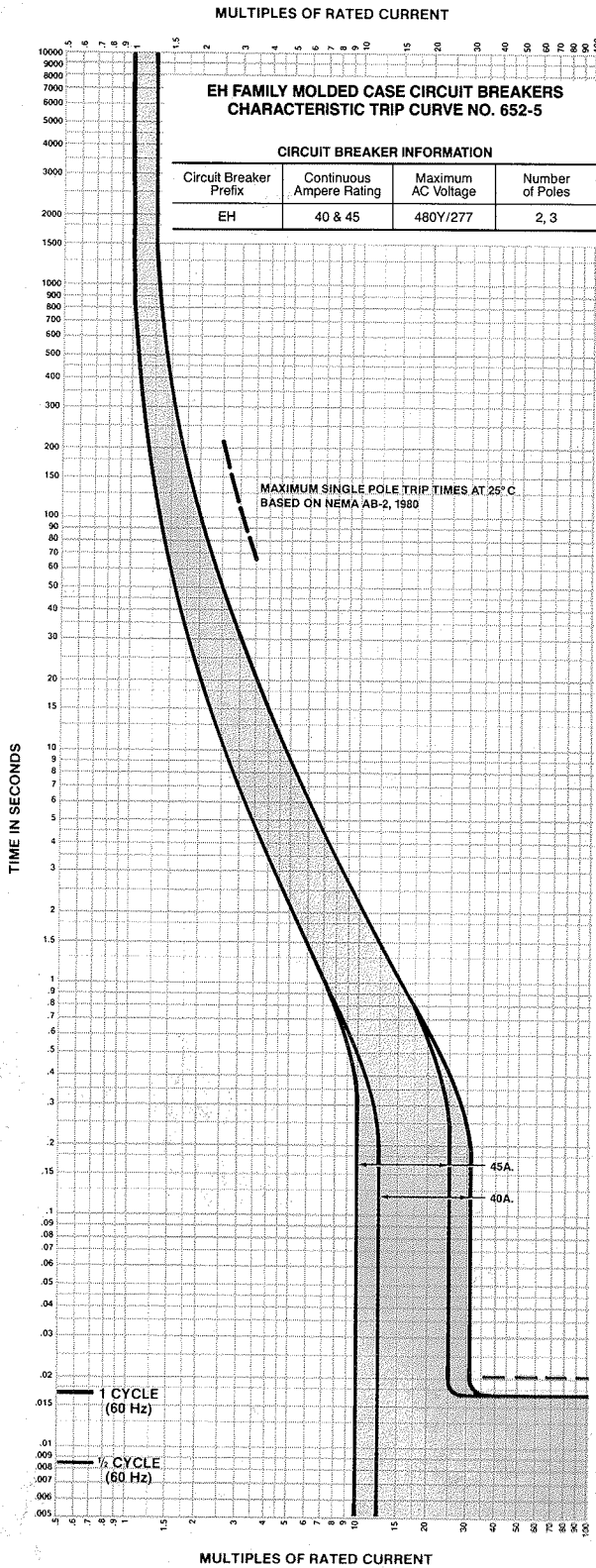
All curves available on tissue stock  
as a set for coordination studies



# EH AND EHB MOLDED CASE CIRCUIT BREAKERS

## CHARACTERISTIC TRIPPING CURVES

CLASS  
**652**

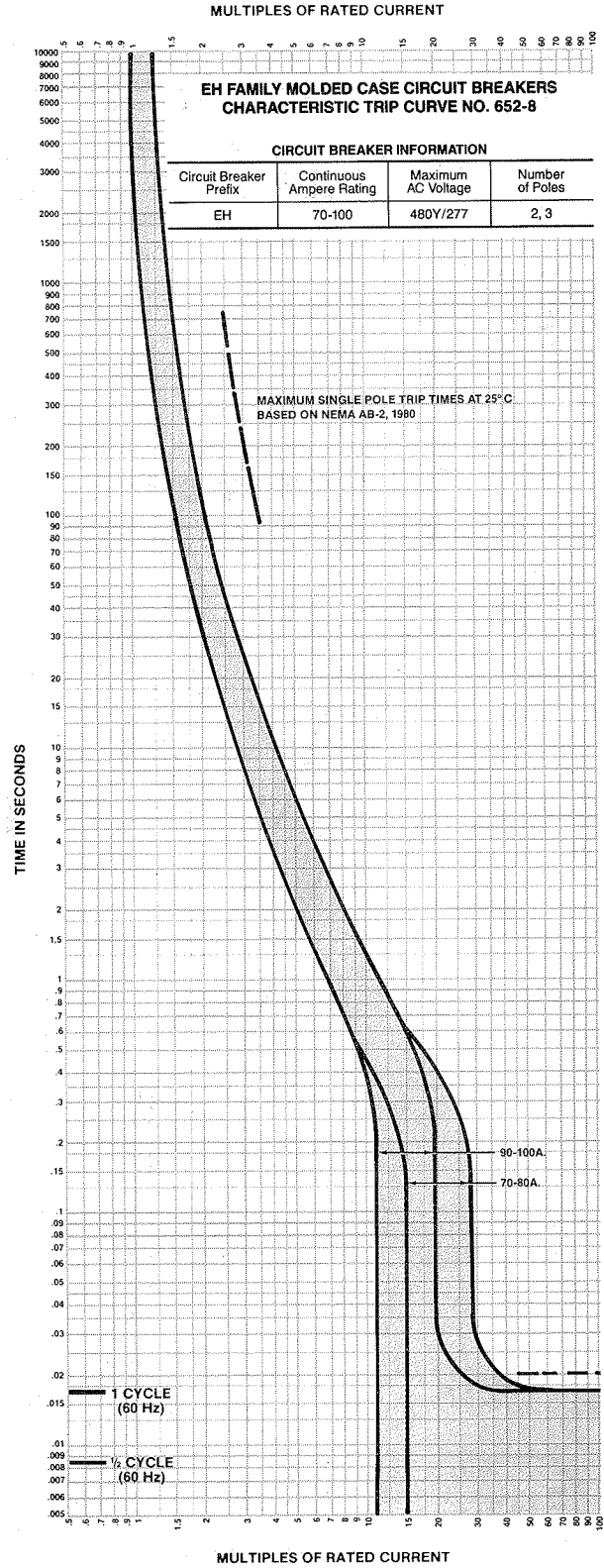
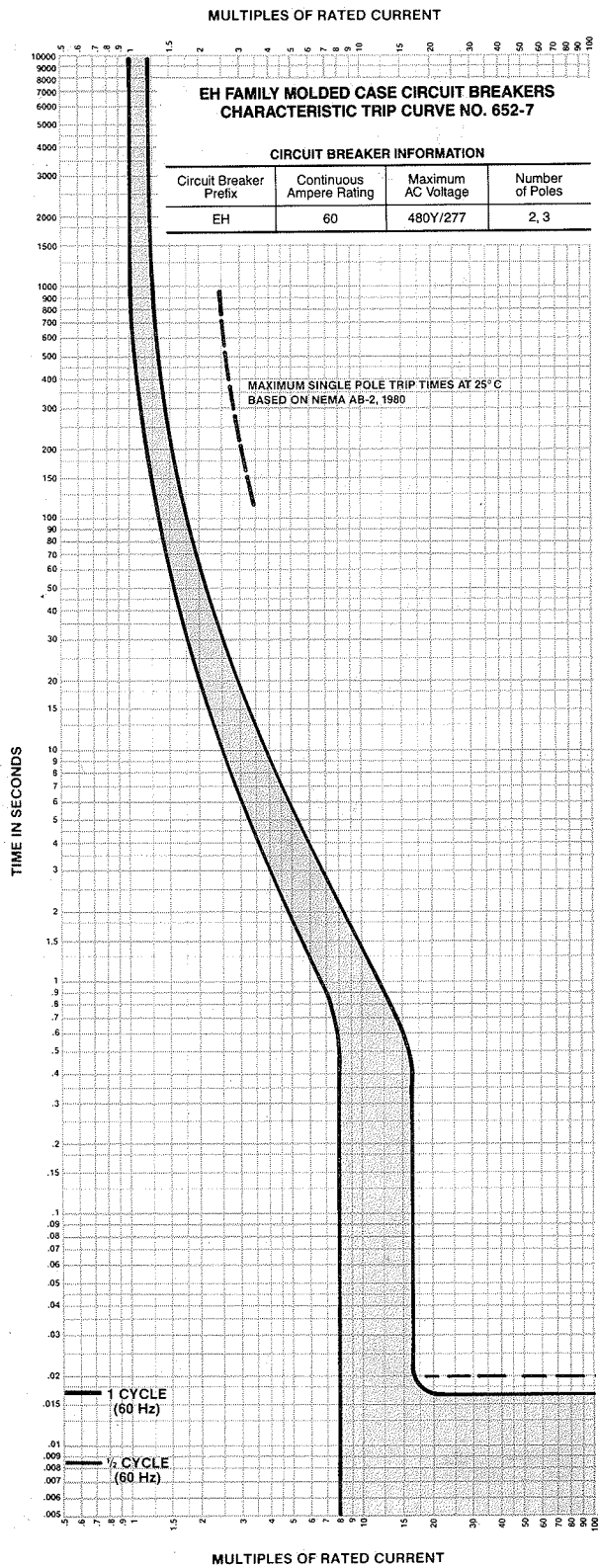


All curves available on tissue stock as a set for coordination studies



# EH AND EHB MOLDED CASE CIRCUIT BREAKERS

## CHARACTERISTIC TRIPPING CURVES



All curves available on tissue stock as a set for coordination studies

