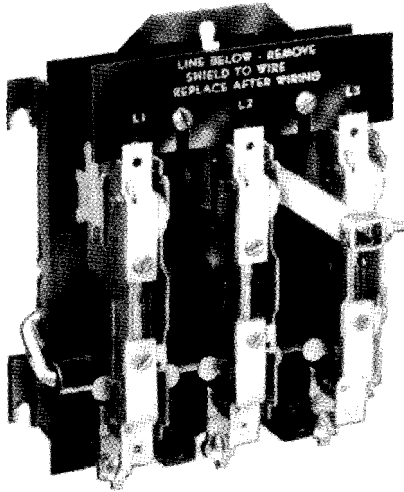
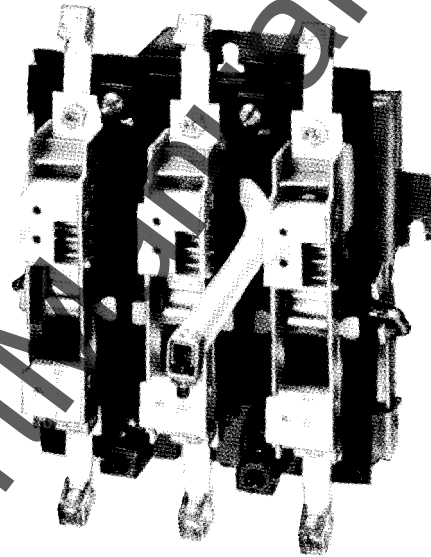




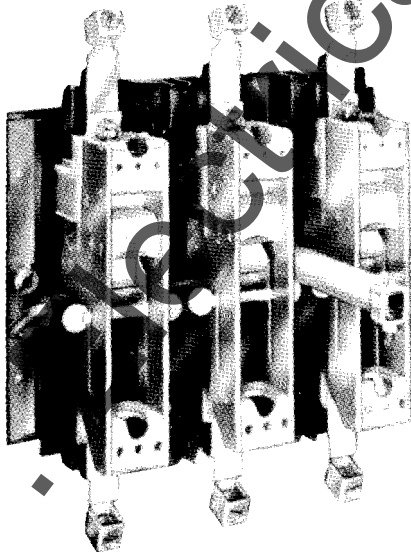
HCI General Purpose Disconnects



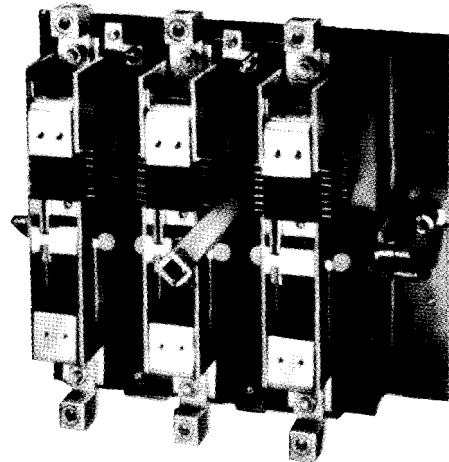
30 AMPERES



60 AMPERES



100 AMPERES



200 AMPERES

WWW

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Quality Designed . . . Thoroughly Tested Horsepower Rated

30-200 Amperes, 240, 480 and 600 Volts AC, 250 Volts DC with adjustable operating shafts, convertible front fusing

General Electric's General Purpose Disconnects are rugged switching devices constructed to carry rated current. Properly fused, they cover a wide range of applications up to 100 hp, 600 V. Compact and front fused, easily installed; with telescopic operating shafts for a wide range of depth adjustments, self-contained pole units, and powerful switching mechanisms – plus other features assure you high quality disconnects at low cost.

The Type HCI disconnect is used for ratings from 30 to 200 amperes. Horsepower ratings with and without fuses are given in Table 2.

These Disconnect Switches, when used in fusible-type combination starters, and equipped with UL listed Class H fuses, are adequate for installation on motor branch circuits where the available asymmetrical short-circuit current at the incoming line terminals of the starter does not exceed 10,000 rms amperes. When equipped with Class J rated size current-limiting fuses, they can be used when the symmetrical short-circuit current is as high as 42,000 rms amperes and the short circuit is at or beyond the load terminals of the starter.

In applying starters in this manner, it is recognized that the impedance of the starter elements have appreciable current-limiting action. This is considered in establishing the above ratings.

Line Terminal Shield

Prevents accidental contact by operator under normal operating conditions. Fastens to switch base. Test holes provided for safe line voltage checks.

Telescopic Operating Shaft

Firm, durable, insulated. Insert shaft and lock in place with locking screw. Permits wide range of depth adjustment.

Pole Units

Self-contained . . . double break . . . spring reinforced U-shaped contacts for safe, sure contact . . . instant arc quenching . . . self-aligning blades. Flexible, yet strong insulating parts of laminated melamine will not carbonize or deteriorate with age.

Solderless Lugs

Solderless lugs are standard equipment on all style HCI disconnects for fast, secure connections.

Rugged Construction

Heavy gauge steel for long switch life. Current-carrying parts plated for cooler operation and better appearance. Mechanism parts are plated for corrosion resistance.

Simplified Mounting

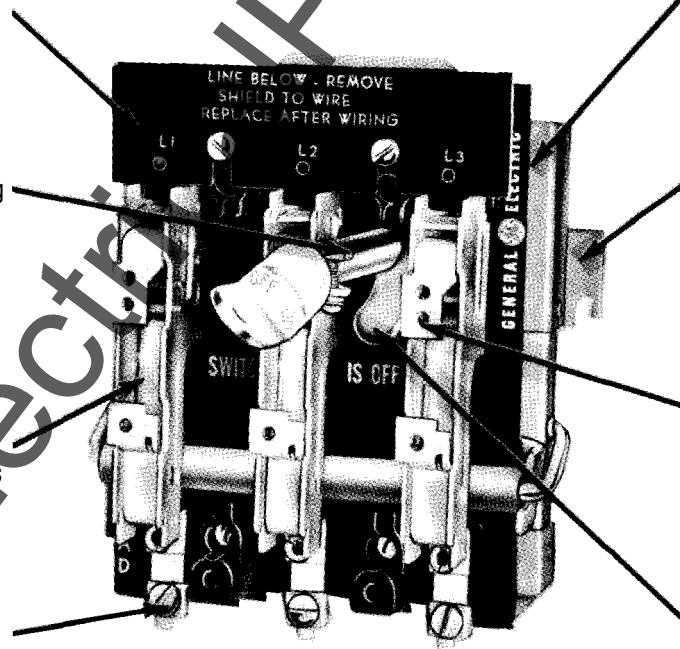
Switches can be mounted in minimum time. 30 and 60 ampere switches with easy-to-get-at 3-point mounting. 100 and 200 ampere switches have 2-point captive-screw mountings.

Convertible Front Fusing

Plated fuse clips are attached directly to switch for quick, convenient fusing – change fuse ratings in minutes without reworking unit.

Switching Mechanism

Mechanism combines a roller-cam action with a powerful spring to give fast quick-make, quick-break action . . . prevents switch from assuming a dead center position . . . means longer contact life.



TYPE HCI DISCONNECTS
30-200 Amperes

Individual Components

HCI switches, fuse and no-fuse kits, are listed in UL "Recognized Component Index" (WHTY2) for mounting in a vertical position, line side up. UL File E36152 Report Mar. 30, 1970. Meets JIC Standard EGP-1-1967-General Purpose Machine Tool Disconnect Switch.

Table 1. Basic Switch, Operating Shafts and TDM Handles

Basic Switch ① ②		Adjustable Operating Shafts ②				TDM Handles ②	
Amp Rating	3-pole ③ Cat. No.	Standard Length		Long Length		General Purpose NEMA Type 1, 12K and 12 ④	Water- and Dust-tight NEMA Type 4 and 5 Sheet-steel Enclosure
		Cat. No. Nom and Max. Inside Enclosure Depths (Inches)		Cat. No. Nom and Max. Inside Enclosure Depths (Inches)			
		Up-Down	Pendulum	Up-Down	Pendulum	Cat. No.	Cat. No.
30	THC31 ⑥ THC31S ⑥	THC1	THC1P	THC1L	THC1PL	THCH1	THCH45 ⑥
		5 1/16—7 1/16		11 1/8 (5 1/16 ⑦)—14			
60	THC32 ⑥ THC32S ⑥	THC2	THC2P	THC1L	THC1PL	THCH1	
		5 9/16 (5 3/8 ⑦)—9 1/4		11 1/8 (5 3/8 ⑦)—14			
100	THC33 ⑥ THC33S ⑥	THC3	THC3P	THC3L	THC3PL	THCH1	
		7 1/4 (6 7/8 ⑦)—9 1/8		12 1/8 (6 7/8 ⑦)—14			
200	THC34 ⑥ THC34S ⑥	THC4	THC4P	THC4L	THC4PL	THCH4	
		9 1/4—14 3/4		14 1/32 (9 1/4 ⑦)—20			

Table 2. Fuse-Clip and No-Fuse Kits

Basic Switch Rating	Basic Switch Cat. No.	Description of Fusing Kit	For No-fuse Device Cat. No. of Kit	For NEC Std Fuses Cat. No. of Kit	For Class J Fuses Cat. No. of Kit ⑩	Horsepower Ratings 3-phase Ac						Dc 250 V	
						NEC Standard			Time-delay Fuses				
						240 V	480 V	600 V	240 V	480 V	600 V		
For Basic Switches with 600-volt Industrial Control and 250-volt Enclosed Switch and Switchboard Clearance Spacings													
30 Amp 3-pole	THC31	No fuse	THC3100	.....	.....	7 1/2	15	20 ⑩	.....	.....	.....	5
		30 amp-250 V	.....	THC3121	.....	3	.....	.....	7 1/2	.....	.....	5
		30 amp-600 V	.....	THC3161	.....	.....	5	7 1/2	.....	15	20	.....
		60 amp-250 V	.....	THC3122	.....	THC31J1	7 1/2	.....	.....	.....	.....	.....
60 Amp 3-pole	THC32 ⑩	No fuse	THC3200	.....	.....	15	30	50	.....	.....	.....	10
		30 amp-250 V	.....	THC3221	.....	3	.....	.....	.....	.....	.....	10
		30 amp-600 V	.....	THC3261	.....	.....	5	7 1/2	.....	.....	.....	.....
		60 amp-250 V	.....	THC3222	.....	THC32J2	7 1/2	.....	.....	15	.....	.....
		60 amp-600 V	.....	THC3262	.....	.....	15	15	.....	30	50	.....
		100 amp-250 V	.....	THC3223	.....	THC32J3	15	.....	.....	.....	.....	.....
100 Amp 3-pole	THC33	No fuse	THC3300	.....	.....	30	60	75	.....	.....	.....	20
		60 amp-250 V	.....	THC3322	.....	7 1/2	.....	.....	.....	.....	.....	20
		60 amp-600 V	.....	THC3362	.....	.....	15	15	.....	.....	.....	.....
		100 amp-250 V	.....	THC3323	.....	THC33J3	15	.....	.....	30	.....	.....
		100 amp-600 V	THC3363	25	25	30	60	75
		200 amp-250 V	.....	THC3324	.....	THC33J4	25	.....	.....	.....	.....	.....
200 Amp 3-pole	THC34	No fuse	THC3400	.....	.....	60	100	100	.....	.....	.....	40
		100 amp-250 V	.....	THC3423	.....	15	.....	.....	.....	.....	.....	40
		100 amp-600 V	.....	THC3463	.....	.....	25	30	.....	.....	.....	.....
		200 amp-250 V	.....	THC3424	.....	THC34J4	25	.....	.....	60	.....	.....
		200 amp-600 V	THC3464	50	50	60	100	100
		400 amp-250 V	.....	THC3425	.....	THC34J5	50	.....	.....	.....	.....	.....
400 amp-600 V	.....	.....	.....	THC3465	.....	.....	100	100	.....	.....	.....	.....
		
		
		
		
		
For Basic Switches with 600-volt Enclosed Switch and Switchboard Clearance Spacings													
30 Amp 3-pole	THC31S	No fuse-600 V	THC3100	.....	.....	7 1/2	15	20 ⑩	.....	.....	.....	5
		30 amp-600 V	.....	THC31S61	.....	3	5	7 1/2	.....	15	20	5
60 Amp 3-pole	THC32S	No fuse-600 V	THC32S00	.....	.....	15	30	50	.....	.....	.....	10
		60 amp-600 V	.....	THC32S62	.....	7 1/2	15	15	.....	30	50	10
100 Amp 3-pole	THC33S	No fuse-600 V	THC3300	.....	.....	30	60	75	.....	.....	.....	20
		100 amp-600 V	.....	THC3363	.....	15	25	30	.....	60	75	20
200 Amp 3-pole	THC34S	No fuse-600 V	THC3400	.....	.....	60	100	100	.....	.....	.....	40
		200 amp-600 V	.....	THC3464	.....	25	50	60	.....	100	100	40

① Line shield included with THC31 and THC31S. All other line shields included with fuse-clip or no-fuse kits.

② For TDM door-mounted handle and shaft dimensions, see page 6. For basic switch dimensions, see Table 7, page 5.

③ **Two-pole applications**—Use 2 poles of 3-pole switch.

④ See table 4 for gaskets for use with NEMA 12 and 12K enclosures.

⑤ For basic switches with UL 600 volt industrial control and 250 volt enclosed switch and switchboard clearance spacings.

⑥ With UL 600 volt enclosed switch and switchboard clearance spacings.

⑦ Shaft-cut off and clearances maintained with maximum over-fusing of switch.

⑧ Includes interlock, 30-60 amp HCI pendulum-operated only.

⑨ Class J fuse kits not UL listed.

⑩ Suitable for 25 hp, but not UL listed.

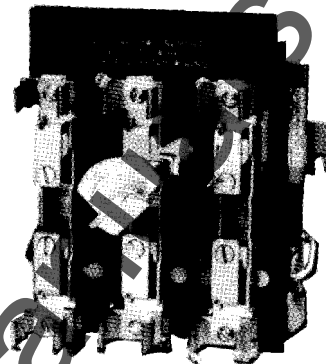
⑪ Basic switch with UL 600 volt industrial control spacings only.

Factory Assembled Fuse Clips & Handles

Accessories and Replacement Parts

DESCRIPTION

These 30-200 ampere disconnect switches are complete with fuse clips and line/load lugs, both factory assembled, and over-packed NEMA 12 handle operators (TDM). They are listed in UL "Recognized Component Index" (WHTY2) for mounting in a vertical position, line side up. They provide 600 volt industrial control electrical spacings ② and are described in UL File E36152.



Cat. No. THC3161AFC Disconnect Switch

Table 3. Basic Switch With Lugs, Fuse Clips, Operating Shafts, and TDM Handles

Disconnect Switch Rating, Amperes	Fuse Clip Rating in Amperes		Maximum HP Ratings ④				Catalog Number ④	Adjustable Handle Shaft will Fit Enclosure Depths Min. -Max. ①
	250 V Max.	600 V Max.	240 V 3Ø	480 V 3Ø	600 V 3Ø	250 VDC use 2 Poles		
30	No fuse - 600 V		7 1/2	15	20	5	THC3100AFC	5 1/8 - 7 1/8
	30	.....	7 1/2	.....	.....	5	THC3121AFC
	.....	30	.....	15	20	5	THC3161AFC
60	No fuse - 600 V		15	30	50	10	THC3200AFC	5 1/8 - 9 1/4 (5 3/8) ③
	60	.....	15	.....	.....	10	THC3222AFC
	.....	60	.....	30	50	10	THC3262AFC
100	No fuse - 600 V		30	60	75	20	THC3300AFC	7 1/4 - 9 1/8 (6 7/8) ③
	100	.....	15	.....	.....	20	THC3323AFC
	.....	100	.....	60	75	20	THC3363AFC
200	No fuse - 600 V		60	100	100	20	THC3400AFC	9 1/4 - 14 3/4
	200	.....	60	.....	.....	40	THC3424AFC
	.....	200	.....	100	100	40	THC3464AFC

- ① Handle and shaft provided are "pendulum" type. If "up-down" operation is required, order individual components from Table 1, Page 3.
 ② For units with 600 volt enclosed switch spacings select individual components from Table 2, Page 3.
 ③ Inside enclosure depth may be reduced to these depths while maintaining electrical spacings - requires cutting handle shaft.

- ④ For lug wire sizes see Table 7, Page 5.
 ⑤ Maximum HP ratings for fusible units may require fuses with time-delay characteristics.

Table 4. Accessories

Description	Enclosure	Handle	Cat. No.
Auxiliary Switch ⑥	Not Applicable		343L296G2
Neoprene Gaskets	NEMA 3R, 12, 12K	THCH1	788A742P3
		THCH4	788A742P4

- ⑥ SPDT: 15 Amp @ 480 volts AC
 0.5 Amp @ 125 volts DC
 0.25 Amp @ 250 volts DC
 ⑦ Does not include shaft insulators.
 ⑧ Order 2 per pole.

Table 5. Replacement Parts

Ampere Rating	Single-pole Units ⑦	Strap and Lug Assembly ⑧
	Cat. No.	Cat. No.
30	36624	.....
60	789A140G2	789A119G1
100	343L228G2	789A118G1
200	36725	566B139P1

Table 6. Optional Line Lug Covers *

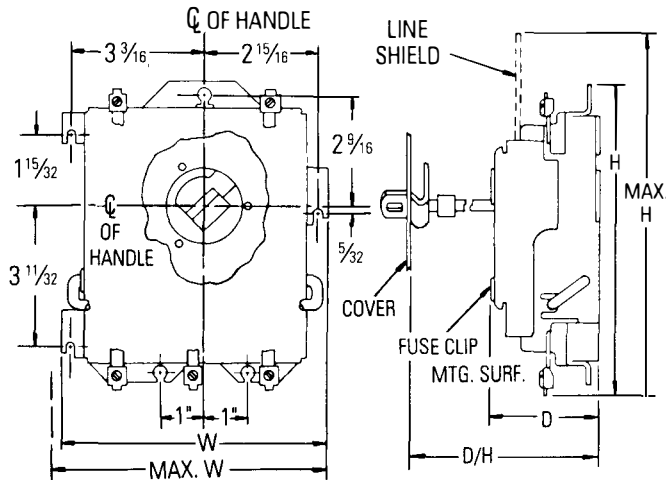
Ampere Rating	Cat. No.	
30 and 60	THC32LS	
100	THC33LS	
200	THC34LS	

* UL Recognized.

Dimensions (For Estimating Only)

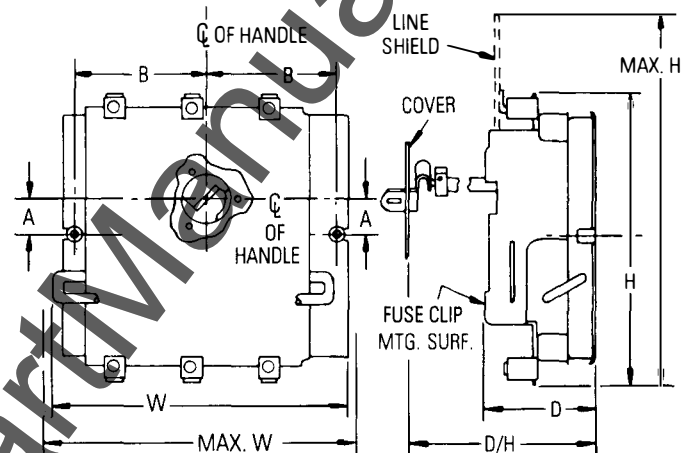
Basic Switch

30-60 Amperes



Cat. No. THC31, THC31S, THC32, THC32S
Outline Drawing 789A184

100-200 Amperes



Cat. No. THC33, THC33S, THC34, THC34S
Outline Drawing 789A197

Table 7.

Cat. No.	Basic Switch							Lug Wire Size	Outline Drawings	Fuse-clip Kits		Handle Shafts*			Outline Drawings
	Dimensions in Inches						Type			Outline Drawings	D/H Dimensions in Inches				
	H	Max H	W	Max W	A	B					D	Nominal	Max	Min	
THC31 THC31S	7 1/16	7 1/2	6 5/8	6 5/8	...	...	2 23/32	#14-8 CU ⑦	789A184	NEC Std 789A184 455C346	THC1 THC1L	5 1/16 11 1/8	7 15/16 14	5 1/16 5 1/16	789A184
										Class J 789A184 455C598	THC1P THC1PL	5 1/16 11 1/8	7 15/16 14	5 1/16 5 1/16	
THC32 THC32S	7 15/32	9 3/32 ①	6 5/8	6 5/8	...	...	2 25/32	#14-2 CU-AL	789A184	NEC Std 789A184 455C347	THC2 THC1L	5 13/16 11 1/8	9 1/4 14	5 9/16 5 9/16	789A184
										Class J 789A184 455C599 455C602	THC2P THC1PL	5 13/16 11 1/8	9 1/4 14	5 9/16 5 9/16	
THC33 THC33S	9 7/8	12 1/16 ③	8 7/8	8 3/4	1	3 5/64	3 1/32		789A198	NEC Std 789A198 455C348	THC3 THC3L	7 1/4 12 1/8	9 7/8 14	6 7/16 6 7/16	789A198
										Class J 789A198 455C601	THC3P THC3PL	7 1/4 12 1/8	9 7/8 14	7 1/4 7 1/4	⑥
THC34 THC34S	12 3/4	13 3/8	12 7/8	12 7/8	1 1/16	5 3/4	4 17/32	#6-250 MCM CU-AL	789A197	NEC Std 789A197 455C349	THC4 THC4L	9 1/4 14 11/32	14 3/4 20	9 1/4 9 1/4	789A197
										Class J 789A197 455C600	THC4P THC4PL	9 1/4 14 11/32	14 3/4 20	9 1/4 9 1/4	

Dimensions (For Estimating Only)

Handle and Shaft Dimensions in Inches

SHAFTS

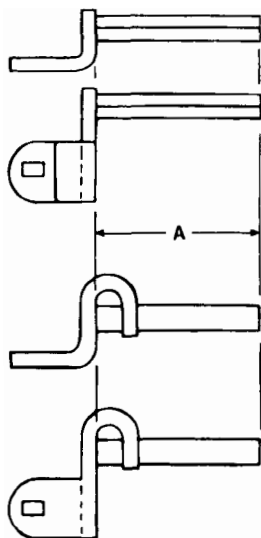


Figure 1.

Figure 2.

Figure 3.

Figure 4.

Table 8.

Cat. No.	Fig. No.	Dimensions In Inches		Max. Enclosure Depth
		A	B	
THC1	1	3 ³ / ₁₆	7 ¹⁵ / ₁₆	14
THC1L	1	9 ⁷ / ₁₆	14	14
THC2	1	4 ³ / ₁₆	9 ¹ / ₄	9 ¹ / ₈
THC3	1	3 ⁵ / ₁₆	9 ¹ / ₈	14
THC3L	1	8 ³ / ₁₆	14	14
THC1P	2	3 ³ / ₁₆	7 ¹⁵ / ₁₆	14
THC1PL	2	9 ¹ / ₁₆	14	14
THC2P	2	4 ³ / ₁₆	9 ¹ / ₄	9 ¹ / ₈
THC3P	2	3 ⁵ / ₁₆	9 ¹ / ₈	14
THC3PL	2	8 ³ / ₁₆	14	14
THC4	3	7 ¹ / ₈	14 ³ / ₄	20
THC4L	3	12 ³ / ₈	20	20
THC4P	4	7 ¹ / ₈	14 ³ / ₄	20
THC4PL	4	12 ³ / ₈	20	20

Figure 1-4. Adjustable Operating Shafts

HANDLES

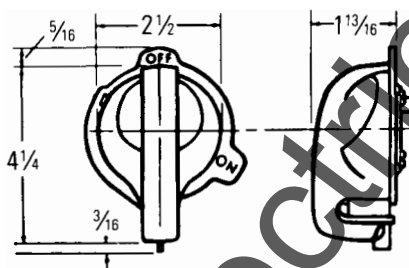


Figure 5.

Cat. No. THCH1 General-purpose Handle
Outline Drawing 798A880

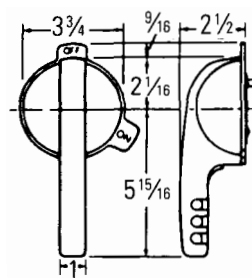


Figure 6.

Cat. No. THCH4 General-purpose Handle
Outline Drawing 791A156

Dimensions (For Estimating Only)

HANDLES

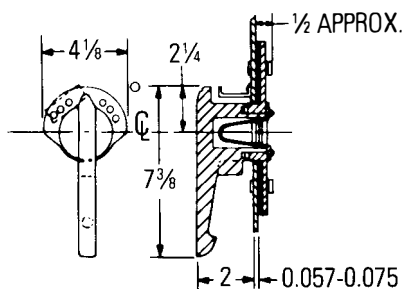


Figure 7.
Cat. No. THCH45 Water- and Dust-tight Handle*
Outline Drawing 792A866

*Suitable for NEMA 4/4X Applications

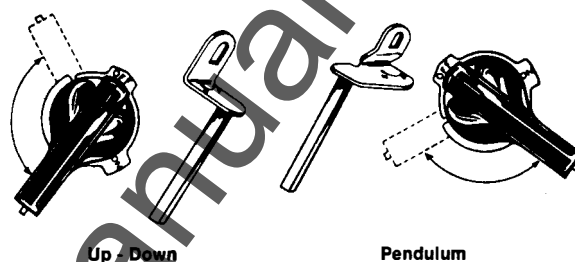


Figure 8.
Up-Down
Pendulum
Switching Motions and Shafts

ORDER OUTLINE DRAWINGS FROM FACTORY

* Nominal = Dimension when standard shaft fully inserted.
Max. = Dimension when standard shaft fully extended. (Allows 1/2-inch shaft engagement.)
Min. = Dimension when ends of shaft cut off to permit maximum insertion.
NOTE: Handle shafts can be cut to fit intermediate dimensions and to obtain minimum dimensions.

- ① Maximum when used with THC3263..
- ③ Maximum when used with THC3325 and THC33J5.
- ⑥ Applies only when switch is fused 200-ampere and above. 6 7/8" applies when fused below 200-amperes.
- ⑦ For 30 amp switch with 600 volt enclosed switch spacing and 60 amp terminals, order Cat. No. THC31SSE.

FUSE-CLIP KIT INSTRUCTION SHEETS

30-A Basic Switch	{	NEC Std.	GEH-3390
		Class J	GEH-3009
60-A Basic Switch	{	NEC Std.	GEH-3391
		Class J	GEH-3010

100-A Basic Switch	{	NEC Std.	GEH-3392
		Under-fusing	GEI-61084
		Class J	GEH-3011
200-A Basic Switch	{	NEC Std.	GEH-3393
		Under-fusing	GEI-61085
		Class J	GEH-3012

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