Guide Form Specifications

Double Throw General Duty Heavy Duty Application General Duty Switches are intended for Heavy Duty Switches are intended for use in Double throw switches are intended to applications where reliable performance and applications where: transfer loads from one power source to continuity of service are needed, but where another. All 2 & 3 pole double throw switches 1. Rugged construction, reliable performance. duty requirements are not severe and usual are suitable for use as service equipment. All continuity of service and ease of mainteservice conditions prevail. (These switches are are UL Listed. Switches are rated for use on nance are emphasized, or intended for use primarily with supply systems with an available fault current of up 2. Available fault currents higher than 10,000A circuits rated 240V AC or less where the availto 10,000 AIC when protected with Class H are likely to be encountered, such as in able fault current is less than 100,000A when fuses or either 100,000 or 200,000 AIC when manufacturing plants, mass production used with Class R or T fuses or 10,000A max. protected with Class R. J or Class T fuses. They industries, and commercial, institution-al and can also be used to connect a single source of when used with Class H fuses.) other large buildings served by network syspower to either of two loads, In this application tems or transformers of higher capacities. it is necessary to field modify fusible switches 3. System voltage is 600V AC or DC Max. so that the fuses are on the load side of the switching mechanism. 4. A Type 12 or 4 / 4X enclosure is required. **Short Circuit** Suitable for use on systems capable of Suitable for use on systems capable of delivering not more than 200,000 RMS symmetrical Withstand delivering not more than 100,000 RMS amperes of fault current as follows: **Ratings** symmetrical amperes of fault current as Sw. Rating & Tpye **AIC Rating** Protective Device® follows: All Heavy Duty & DT 10.000 Circuit Breaker 30-600A HD & DT 10,000 Class H Fuse AIC Rating Sw. Rating Protective Device 1 60A Compact HD 100.000 Class R, J or T Fuse 30-600A 10,000 Circuit Breaker GD & 4P DT 100,000 Class R, J or T Fuse Class H Fuse 30-600A 10,000 30-600A HD 200.000 Class R. J or T Fuse 30-600A 100,000 Class R Fuse 30-600A DTF & DTNF DT² 200,000 Class R, J or T Fuse 100-600A 100,000 Class J or T Fuse 800 & 1200A HD & DT² 200,000 Class L or T Fuse **Fuses** Fusible switches will accept the following Fusible switches will accept the following Fusible switches will accept the following UL class fuses: UL class fuses: UL class fuses: 30 "LF" - 30A max plug Fuses 30-600A "HF" Class H & K, Class R with kit 30-200A "DT" & "F" Class H & K, Class R with kit 30-600A "GF" Class H & K, Class R with kit 30-600A, 600V "HF" Class J-move base 30 & 60A 600V "DT" Class J-move base 100-600A "GF" Class J-move base 100-600A, 240V "HF" Class J-move base 100-200A "DT" Class J-move base. Class T with kit 100-200 "GF" Class T with kit 100-200A "HF" Class T with kit 400-600A "DT" Class J-standard, Class T-move bases 400-600A "GF" Class T-move bases 400-600A "HF" Class T-move bases 400A 240v "F" Class H-standard 400A, 600V & 600A "F" Class T-Standard 800-1200A "HF" Class L, Class T with kit® Cover Dual cover interlocks standard on all double Voidable – cover interlocks on switches pre-Voidable dual cover interlocks standard on Interlocks throw switches. Prevents cover from being vent the switch door from being opened when all heavy duty switches. Prevents cover from opened when switch is in the "ON" position in the "ON" position. No cover interlock on being opened when switch is in the "ON" 30A Type 3R or on plug fuse type switches. and prevents switch from being turned "ON" position and prevents switch from being when door is opened. turned "ON" when door is opened. **Underwriters**' Listed by UL under file #E4776 as enclosed switches and also suitable for use as service equipment (where applicable). Laboratories, Inc. UL98 Enclosed and Deadfront Switches. **NEMA** Meet NEMA standard KS-1-2001 for type GD Meet NEMA standard KS-1-2001 for type HD Meet NEMA standard KS-1-2001 type GD **Specifications** switches. for "DTG" & type HD for "DT", "F" & "NF" switches. Seismic All GD & HD switches and "DT" type double throw switches have been tested and comply with the 2010 California Building Code (CBC) Qualifications and with the 2009 International Building Code (IBC) - Compliance Level SDS = 1.85 g Groundable Fusible switches have groundable neutral All switches (both Fusible and Non-Fusible) All except 4 pole switches will accept field Neutral blocks factory installed. Non-fusible switches are either supplied with factory installed neuaddable neutrals except that "DTG" 100 & (All neutrals are accept field addable neutrals. trals or accept field addable neutrals. 200A switches are also available with factory bondable for service installed neutrals. entrance use.) Padlockable cover latch and multiple OFF pad-**Padlocks** Padlockable cover latch. OFF padlock Padlockable cover latch and multiple OFF padlock provisions on handle. provisions on handle. lock provisions on handle. **HP & Load** All General Duty, Heavy Duty and Double Throw Switches are both load break and horsepower rated. **Break Ratings**

The protective device can either be a fuse installed in a fusible switch or an upstream fuse or circuit breaker protecting a non-fusible switch. The ampere rating of the

upstream protective device must not exceed the switch ampere rating.

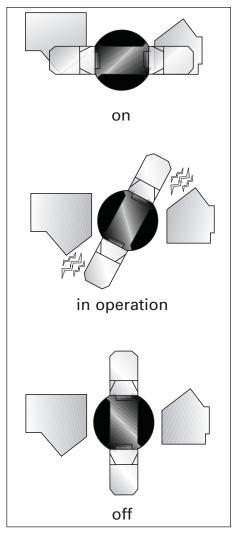
② All 4 pole and fusible double switches with catalog numbers starting with "F" are rated 100,000 AlC max.

[®] Class T kit available for 240V max. applications on 1200A switches.

Feature Comparison

Product Overview

General Duty	Heavy Duty	Double Throw	Features / Ratings					
			30 thru 600 Amps					
	•		800 and 1200 Amps					
	•		240 Volt AC					
			600 Volt AC					
	•		250 Volt DC					
	•		600 Volt DC					
•	•	•	Double-break visible blade design (30-200A)					
	•		Quick-make, quick-break switching action					
	•		Highly visible ON/OFF handle indication					
			Handle design for hook stick operation					
	•		Padlockable cover latch					
	•		Padlockable handle					
- 3			Single voidable cover interlock					
			Dual voidable cover interlock					
	•		Type 1 enclosure					
	•		Type 3R enclosure					
	•		Type 12 enclosure					
	•		Type 4 / 4X enclosures					
•	•	•	Generous wiring gutters that meet UL and NEC wire-bending space requirements					
•	•	•	Lugs suitable for copper or aluminum at 60° or 75°C					
•	•	•	CU/AL wire lugs that meet UL 486B requirements					
	•	•	Suitable for field-convertible compression connectors					
•6	•	•	All plated copper current carrying parts (except lugs)					
•	•	•	Spring reinforced Fuse Clips (except 30A general duty) ²					
			Clear pivoting line terminal shield					
	•		Replacement parts					
	•		Field addable 200% neutral					
•7	■①⑦	1 07	Provisions for UL Class T, R and H Fuses					
	•	•①	Provisions for UL Class J and L Fuses					
	•		Metal nameplate					
60-600A	•		Aux. switch kits					
	4		Type 4X with stainless steel interior parts					
5	•		Rolled flange enclosure design (30-200A)					
	•		Isolated ground kits					



Double Break Switching Action

Like the time-proven Vacu-Break Design, the Siemens VBII double break switching action breaks the arc in two places in 30-200A ratings. This reduces heat generation and increases switching speed by doubling the breaking distance. The result is enhanced performance and increased longevity. We also provide the most visible blade design available today. Unlike conventional knife blade switches, the blades are self-aligning to ensure positive contact. In addition, they have no wear and friction point since the "electrical hinge" has been eliminated. The result is a very fast, positive and reliable switching action for even the most severe applications.

 ^{0 400, 600}V & 600A fusible, double-throw switches accept only Class J or T fuses. Only 800 & 1200A HD switches will accept Class L fuses.

② 30A general duty switches have fuse clips constructed of spring type copper.

[®] Not supplied on 30A outdoor & plug fuse switches.
@ 30-200A Type VBII in stainless steel enclosures.
® 60-200A.

^{© 200}A general duty switches have aluminum neutral assemblies.

© 100-600A GD & DT and 100-1200A HD switches will

^{© 100-600}A GD & DT and 100-1200A HD switches will accept Class T fuses.

General Duty and Heavy Duty

Enclosure Types

- Type 1 enclosures are intended for indoor use primarily to provide protection against contact with the enclosed equipment in locations where unusual service conditions do not exist.
- B **Type 3R** enclosures are intended for outdoor use primarily to provide a degree of protection against falling rain and sleet and must remain undamaged by the formation of ice on the enclosure. They are not intended to provide protection against conditions such as dust, internal condensation, or internal icing.
- Type 4, 4X enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against windblown dust, rain, splashing water and hose-directed water. They are not intended to provide protection against conditions such as internal condensation or internal icing. Also meets 4X definition by providing a high degree of protection against corrosion. Siemens 30-200A stainless steel 4X switches are supplied stainless interior parts and hardware as standard.
- Type 4 enclosures are intended for indoor or outdoor use primarily to provide a degree of protection against windblown dust, rain, splashing water and hose-directed water. They are not intended to provide protection against conditions such as internal condensation or internal icing.
- E Type 12[®] enclosures are intended for indoor use primarily to provide a degree of protection against dust, falling dirt and dripping water. They are not intended to provide protection against conditions such as internal condensation.

Type 7/9 enclosures for use in hazardous locations. Use with molded case switches listed in Section 7.



All Siemens safety switches are load break rated. The load break rating is assigned by UL after the switching unit has successfully performed the following tests:

Switch	Number of ON/OFF	Number of Operations						
Ampere Rating	Operations per Minute	With Current	Without Current	Total				
30–100	6	6000	4000	10000				
200	5	6000	2000	8000				
400	4	1000	5000	6000				
600	3	1000	4000	5000				
800	2	500	3000	3500				
1200	1	500	2000	2500				

Horsepower Ratings

All Siemens safety switches, where appropriate, are horsepower rated. Ratings are approved by UL only after the switching unit has undergone testing to determine its acceptability which includes repeated interruption of the locked rotor current of the motor for which it is to be rated as follows:

Max HP Rating	Number of ON/OFF Operations per minute	Number of Cycles of Operation
100	6	50
500	1	10









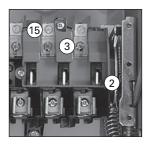
Non-Fusible Safety Switch AIC Ratings When Protected by a Circuit Breaker²³

Breaker Frame	Non-Fused Switch	UL Listed Short Circuit Current Rating				
NEG, NGB, ED4	30 DT (240V)	18 kA Thru 240 VAC				
NEB, NEG, NGG, NGB, ED4	60-100A GD & DT (240V)	18 kA Thru 240 VAC				
NEB, NEG, NGG, NGB, ED4	30-100A HD & DT (600V)	18 kA Thru 480 VAC				
ED6	30-100A HD & DT (600V)	18 kA Thru 600 VAC				
FD6-A, JD6-A	200A HD & DT (600V)	18 KA Thru 600 VAC				
JD6-A, LD6-A	400A GD & DT (240V)	18 kA Thru 240 VAC				
JD6-A, LD6-A	400A HD & DT (600V)	18 kA Thru 600 VAC				
LD6-A	600A GD & DT (240V)	25kA Thru 240 VAC				
LD6-A	600A HD & DT (600V)	25kA Thru 600 VAC				
NNG	1200A HD & DT (600V)	25 kA Thru 600 VAC				

VBII Type 12 switches are also rated 3R & 3S for outdoor use. Type 3R is defined in B above. 3S rated enclosures provide a degree of protection against windblown dust and allow operation when the enclosure is ice laden.

② All switches above are rated at 10 KA when protected by any UL Listed CB

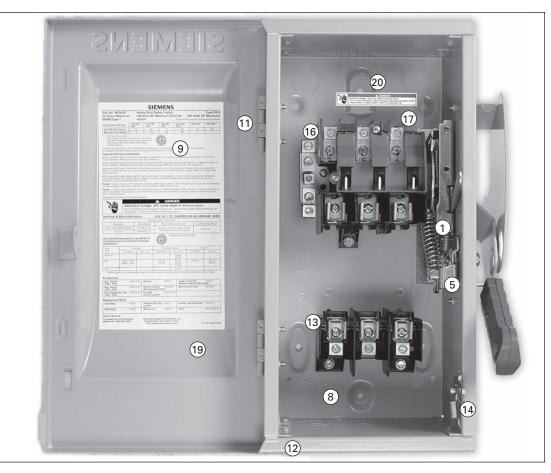
³ Circuit breaker trip rating must not exceed switch ampere rating











- Quick-make, quick-break operating mechanism that ensures positive operation.
- 2. Visible blade, double-break switching action.
- 3. Arc chutes dissipate heat and prolong switch life.
- **4.** Highly visible red handle grip. Designed for hook stick operation.
- 5. Defeatable dual cover interlock.
- Center punch provided for field drilling to allow ON padlocking.
- 7. Handle can be padlocked in the OFF position with up to (3) padlocks with 5/16" hasps.
- Generous top, bottom and side gutters that meet or exceed NEC wire-bending space requirements.
- 9. Informative door labeling which includes replacement parts list.
- **10.** Tangential knockouts through 600A for easy conduit lineup.
- **11.** Side-hinged door that opens past 180 degrees for easier wiring.

- Unique enclosure design increases rigidity and prevents cuts and scrapes to conductors and installer's hands.
- **13.** Spring reinforced fuse clips that assure reliable contact for cool operation.
- Door latch securely holds door closed and allows cover padlocking.
- **15.** Front removable mechanical lugs that are suitable for CU/Al 60 or 75° C conductors.
- **16.** Lugs are field convertible to copper body and to a wide variety of compression connectors.
- Hinged clear line terminal shield with probe holes for inspecting or testing line side terminals.
- Embossed aluminum nameplate on Heavy Duty Switches provides highly visible ON/OFF indication.
- **19.** Drawn cover for increased rigidity and resistance to abuse.
- **20.** Top key hole and bottom mounting holes provide easy 2 or 3 point mounting.





			Indoor — Type 1 Outo		Outdoor — Type 3R		Horsepower Rating							
	1	Ampere	Catalog	Ship	Catalog Ship		240 Volt		480 Volt		600 Volt		250V	600V
Syste				Wt. (lbs.)	Number	Wt. (lbs.)	1-Phase	3-Phase	1-Phase	3-Phase	1-Phase	3-Phase		DC

600 Volt Non-Fusible[®]

2-Pole ³)							480 V	olt AC	/ 600 \	olt AC	/ 600 \	olt DC
	30	HNF261	12	HNF261R	13	_	_	7½	_	10		5	15
1///	60	HNF262	19	HNF262R	20	_	_	20	_	25	_	10	30
	100	HNF263	24	HNF263R	25	_	_	30	_	40	_	20	50
3-Pole			<u> </u>				l	480 V	olt AC	/ 600 \	olt AC	/ 250 \	olt DC
	30	HNF361	12	HNF361R	13	5	10	7½	20	10	30	5	_
	30	_	_	HNF361RL®	19	5	10	7½	20	10	30	5	_
	60	HNF362H ²	11	HNF362RH ²	11	10	20	20	50	20	40	10	_
1	60	HNF362 ^①	18	HNF362R ^①	19	10	20	20	50	25	60	10	30♡
	60]_	_	HNF362RL®	24	10	20	20	50	25	60	10	30♡
1///	100	HNF363 ^①	23	HNF363R ^①	24	15	40	30	75	40	100	20	50 ^⑦
	200	HNF364 ^①	46	HNF364R ^①	47	15	60	50	125	50	150	40	50
' ' '	400	HNF365A ^①	75	HNF365RA ^①	75	15	125	50	250	50	350	50	_
	600	HNF366A®	77	HNF366RA®	77	15	200	50	400	50	500	50	-
	800	HNF367	295	HNF367R	295	15	250	50	500	50	500	50	_
	1200	HNF368	305	HNF368R	307	15	250	50	500	50	500	50	_

600 Volt Non-Fusible®

2-Pole ³								480 V	olt AC	/ 600 \	olt AC	/ 600 \	olt DC
		Type 4 / 4X St	ainless [®]	Type 12 Industria	S								
1.1.	30	HNF261S	13	HNF261J	13	1 —	_	7½	_	10	_	5	15
1 77	60	HNF262S	20	HNF262J	20	_	-	20	_	25	_	10	30
	100	HNF263S■	25	HNF263J■	25	_	_	30	_	40	_	20	50
3-Pole								480 V	olt AC	/ 600 \	olt AC	/ 250 \	olt DC
	30	HNF361S	13	HNF361J	13	5	10	7½	20	10	30	5	_
	60	HNF362SH ²	15	HNF362JH ²	14	10	20	20	50	20	40	10	_
	60	HNF362S ^①	19	HNF362J ^①	19	10	20	20	50	25	60	10	30♡
1	100	HNF363S ^①	24	HNF363J ^①	24	15	40	30	75	40	100	20	50 ^⑦
	200	HNF364S ^①	47	HNF364J ^①	47	15	60	50	125	50	150	40	50
1///	400	HNF365SA®	75	HNF365JA ^①	75	15	125	50	250	50	350	50	_
	400	HNF365SSA	75	-	_	15	125	50	250	50	350	50	_
1 ' ' '	600	HNF366SA®	77	HNF366JA ^①	77	15	200	50	400	50	500	50	_
	600	HNF366SSA	77	-	_	15	200	50	400	50	500	50	_
	800	HNF367S	295	HNF367J■	295	15	250	50	500	50	500	50	_
	1200	HNF368S■	310	HNF368J■	310	15	250	50	500	50	500	50	_

- Built to order. Allow 3-5 weeks for delivery.
- © 60-600A 3-Pole switches are also rated 600V DC.
- Compact switch (11.1"H, 6.6"W box less cover and handle).
 Short circuit withstand rating—100,000 RMS sym. amps.
 Use 3-Pole switch for 200A application.
- Suitable for use as service entrance equipment except for 1200 when used on a 480 or 600V grounded wye system.
 Also rated type 3S / 3R.
- © Indicates oversized enclosure (30A switch in a 60A enclosure or a 60A switch in a 100A enclosure.
- ② 600V DC and 600V DC horsepower rating shown requires (2) poles to be connected in series.
- ® 304 grade stainless steel. For switches with enclosures constructed from 316 grade stainless steel, see page 4-16.

General and Heavy Duty Safety Switches

Dimensions

Safety Switch Dimensions (Inches)* & Shipping Weights

Safety Switch Diffiensions (inches)	· ·	philig v	veignis	Width					
	Height	With	With	wiath	With	Depth	With	-	Shipping
Catalog Number	Box A	Door	Rain Shed	Box D	Handle	Box F	Handle G	Knockout Diagram ^①	Weight (lbs.)
HF362J, JW	16.27	19.31	_	9.17	11.47	5.33	10.46		20
HF362N	16.26	17.46	_	9.15	11.53	5.05	10.17	S16	19
HF362NR	16.26	_	17.77	9.16	11.53	5.05	10.17	S17	20
HF362R, RPV, RPVPG, RW	16.26	_	17.77	9.16	11.53	5.05	10.17	S17	20
HF362RL	21.95	_	23.46	9.64	11.97	5.05	10.17	S11	25
HF362S, SS, SSW, SW	16.27	19.31	_	9.17	11.47	5.33	10.46	<u> </u>	20
HF363, PV, PVPG	21.95	23.15	_	9.64	12.01	5.05	10.17	S10	24
HF363J, JW	21.96	23.16	_	9.65	12.02	5.34	10.46	_	25
HF363N	21.95	23.15	_	9.64	12.01	5.05	10.17	S10	25
HF363NR	21.95	_	23.46	9.64	11.97	5.05	10.17	S11	26
HF363R, RPV, RPVPG	21.95	_	23.46	9.64	11.97	5.05	10.17	S11	25
HF363S, SS, SSW, SW	21.96	23.16	_	9.65	12.02	5.34	10.46	_	25
HF364, PV, PVPG	29.9	31.07	_	14.62	16.98	6.36	12.33	S12	48
HF364J, JW	29.96	31.07	_	14.62	16.95	6.63	12.58	_	49
HF364N	29.9	31.07	_	14.62	16.98	6.36	12.33	S12	49
HF364NR	29.9	_	31.42	14.61	16.99	6.36	12.33	S13	48
HF364R, RPV, RPVPG	29.9		31.42	14.61	16.99	6.36	12.33	S13	49
HF364S, SS, SSW, SW	29.96	31.07	_	14.62	16.95	6.63	12.58	-	49
HF365A	45.32	45.81	_	22.4	23.404	6.94	9.93	S18	93
HF365JA, HF365JWA HF365NA	45.32	45.81	_	22.4	23.404	6.97	10.05		93
111 111111	45.32	45.81	_	22.4	23.404	6.94	9.93	S18	94.6
HF365NRA	45.32	45.81	_	22.4	23.404	6.94	9.93	S19	94.6
HF365RA	45.32	45.81	_	22.4	23.404	6.94	9.93	S19	93
HF365SA, HF365SWA HF365SSA, HF365SSWA	45.32 45.32	45.81 45.81		22.4 22.4	23.404	7.34 7.34	10.347		93 93
HF366A	45.32	45.81	_	22.4	23.404	6.94	9.93		98
HF366JA, HF366JWA	45.32	45.81	-	22.4	23.404	6.97	10.05	-	98
HF366NA	45.32	45.81		22.4	23.404	6.94	9.93	S18	99.6
HF366NRA	45.32	45.81	_	22.4	23.404	6.94	9.93	S19	99.6
HF366RA	45.32	45.81		22.4	23.404	6.94	9.93	S19	98
HF366SA	45.32	45.81	_	22.4	23.404	7.34	10.347	—	98
HF366SSA	45.32	45.81	_	22.4	23.404	7.34	10.347	_	98
HF367	66.67	67.16	_	38.4	39.96	9.24	14.68	_	380
HF367J	66.67	67.16	_	38.4	39.96	9.24	14.68	_	380
HF367N	66.67	67.16	_	38.4	39.96	9.24	14.68	_	382
HF367NR	66.67	_	67.74	38.4	40.25	9.24	14.68	_	386
HF367R	66.67	_	67.74	38.4	40.25	9.24	14.68	_	382
HF367S	66.67	67.16	_	38.4	39.96	9.24	14.68	_	380
HF368, J, S	66.67	67.16	_	38.4	39.96	9.24	14.68	_	383
HF368N	66.67	67.16	_	38.4	39.96	9.24	14.68	_	385
HF368NR	66.67	_	67.74	38.4	40.25	9.24	14.68	_	388
HF368R	66.67	_	67.74	38.4	40.25	9.24	14.68		385
HNF365JA	45.32	45.81	_	22.4	23.404	6.97	10.05	_	75
HNF365RA	33.47	33.96	_	22.4	23.404	6.94	9.93	S19	75
HNF365SA	33.47	33.96		22.4	23.404	7.34	10.347		75
HNF365SSA	33.47	33.96	_	22.4	23.404	7.34	10.347	_	75
HNF366SA	33.47	33.96	_	22.4	23.404	7.34	10.347	_	77
HNF366SSA	33.47	33.96	_	22.4	23.404	7.34	10.347		77
HNF366JA	45.32	45.81	_	22.4	23.404	6.97	10.05		77
HNF366RA	33.47	33.96		22.4	23.404	6.94	9.93	S19	77
HNF361, PV, PVPG also HNF261 & HNF362H	11.11	12.31		6.64	9.01	5.05	10.17	S7	12
HNF361J, JW also HNF261J & HNF362JH	11.12	14.14	12.62	6.65	9.02	5.56	10.46		13
HNF361R, RPV, RPVPG also HNF261R & HNF362RH	11.11	_	12.63	6.64	9.01	5.05	10.17	S9	13
HNF361RL	16.26	1414	17.77	9.16	11.53	5.05	10.17	S17	20
HNF361S, SS, SSW, SW also HNF261S & HNF362SH	11.12	14.14	_	6.65 9.15	9.02	5.56 5.05	10.46		13 18
HNF362, PV, PVPG also HNF262 HNF362J, JW also HNF262J	16.26	+	_	-	11.53 11.47		<u> </u>	S16	19
HNF362R, RPV, RPVPG also HNF262R	16.27 16.26	17.46	17.77	9.17 9.16	11.47	5.33 5.05	10.46		19
HNF362RL	21.95	_	23.46	9.16	11.53	5.05	10.17	S17 S11	24
HNF362S, SS, SSW, SW also HNF262S	16.27	17.46	23.46	9.64	11.97	5.33	10.17	311	19
HNF363, PV, PVPG also HNF263	21.95	23.15	_	9.64	12.01	5.05	10.46	S10	23
HNF363J, JW also HNF263J	21.95	23.15		9.65	12.01	5.34	10.17		24
HNF363R, RPV, RPVPG also HNF263R	21.95	23.10	23.46	9.64	11.97	5.05	10.46	S11	24
HNF363S, SS, SSW, SW also HNF263S	21.95	23.16	23.46	9.65	12.02	5.34	10.17	-	24
FINE DOOD, DO, DONN, DAN BISO HINE 2020	21.90	23.10		9.00	12.02	0.34	10.46		

^{*}For inches / millimeters conversion, multiply inches by 25.4.

 $[\]ensuremath{\mathbb{O}}$ Knocks not provided on Type 4 / 4X and 12 or in 800 & 1200A switches.