

Type VBII Safety Switches

Guide Form Specifications

Product Overview

1
SAFETY
SWITCHES

	General Duty	Heavy Duty	Double Throw																																	
Application	General Duty Switches are intended for applications where reliable performance and continuity of service are needed, but where duty requirements are not severe and usual service conditions prevail. (These switches are intended for use primarily with supply circuits rated 240V AC or less where the available fault current is less than 100,000A when used with Class R or T fuses or 10,000A max. when used with Class H fuses.)	Heavy Duty Switches are intended for use in applications where: <ol style="list-style-type: none"> 1. Rugged construction, reliable performance, continuity of service and ease of maintenance are emphasized, or 2. Available fault currents higher than 10,000A are likely to be encountered, such as in manufacturing plants, mass production industries, and commercial, institutional and other large buildings served by network systems or transformers of higher capacities. 3. System voltage is 600V AC or DC Max. 4. A Type 12 or 4/4X enclosure is required. 	Double throw switches are intended to transfer loads from one power source to another. All double throw switches are CSA certified. Switches are rated for use on systems with an available fault current of up to 10,000 AIC when protected with Class H fuses or 200,000 AIC when protected with Class R, J or Class T fuses. They can also be used to connect a single source of power to either of two loads. In this application it is necessary to field modify fusible switches so that the fuses are on the load side of the switching mechanism.																																	
Short Circuit Withstand Ratings	Suitable for use on systems capable of delivering not more than 100,000 RMS symmetrical amperes of fault current as follows: <table border="1"> <thead> <tr> <th>Sw. Rating</th> <th>AIC Rating</th> <th>Protective Device^①</th> </tr> </thead> <tbody> <tr> <td>30-200A</td> <td>10,000</td> <td>Circuit Breaker</td> </tr> <tr> <td>30-200A</td> <td>10,000</td> <td>Class H Fuse</td> </tr> <tr> <td>30-200A</td> <td>100,000</td> <td>Class R Fuse</td> </tr> <tr> <td>100-200A</td> <td>100,000</td> <td>Class J or T Fuse</td> </tr> </tbody> </table>	Sw. Rating	AIC Rating	Protective Device ^①	30-200A	10,000	Circuit Breaker	30-200A	10,000	Class H Fuse	30-200A	100,000	Class R Fuse	100-200A	100,000	Class J or T Fuse	Suitable for use on systems capable of delivering not more than 200,000 RMS symmetrical amperes of fault current as follows: <table border="1"> <thead> <tr> <th>Sw. Rating & Type</th> <th>AIC Rating</th> <th>Protective Device^②</th> </tr> </thead> <tbody> <tr> <td>All Heavy Duty & DT</td> <td>10,000</td> <td>Circuit Breaker</td> </tr> <tr> <td>30-600A HD & DT</td> <td>10,000</td> <td>Class H Fuse</td> </tr> <tr> <td>30-600A HD</td> <td>200,000</td> <td>Class R, J or T Fuse</td> </tr> <tr> <td>30-600A DTFC & DTNFC DT</td> <td>200,000</td> <td>Class R, J or T Fuse</td> </tr> <tr> <td>800 & 1200A HD</td> <td>200,000</td> <td>Class L or T Fuse</td> </tr> </tbody> </table>	Sw. Rating & Type	AIC Rating	Protective Device ^②	All Heavy Duty & DT	10,000	Circuit Breaker	30-600A HD & DT	10,000	Class H Fuse	30-600A HD	200,000	Class R, J or T Fuse	30-600A DTFC & DTNFC DT	200,000	Class R, J or T Fuse	800 & 1200A HD	200,000	Class L or T Fuse	
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30-600A DTFC & DTNFC DT	200,000	Class R, J or T Fuse																																		
800 & 1200A HD	200,000	Class L or T Fuse																																		
Fuses	Fusible switches will accept the following CSA class fuses: 30 "LF" - 30A max plug Fuses 30-200A "GD" Class H & K, Class R with kit 100-200A "GD" Class J-move base 100-200A "GD" Class T with kit	Fusible switches will accept the following CSA class fuses: 30-600A "HD" Class H & K, Class R with kit 30-600A, 600V "HD" Class J-move base 100-600A, 240V "HD" Class J-move base 100-200A "HD" Class T with kit 400-600A "HD" Class T-move bases 800-1200A "HD" Class L, Class T with kit ^②	Fusible switches will accept the following CSA class fuses: 30-200A "DT" - Class H & K, Class R with kit 30 & 60A 600V "DT" - Class J-move base 100-200A "DT" - Class J-move base, Class T with kit 400-600A "DT" - Class J-standard, Class T-move bases																																	
Cover Interlocks	Voidable – cover interlocks on switches prevent the switch door from being opened when in the "ON" position. No cover interlock on plug fuse type switches.	Voidable dual cover interlocks standard on all heavy duty switches. Prevents cover from being opened when switch is in the "ON" position and prevents switch from being turned "ON" when door is opened.	Dual cover interlocks standard on all double throw switches. Prevents cover from being opened when switch is in the "ON" position and prevents switch from being turned "ON" when door is opened.																																	
Specifications	CSA certified under file #24563 as enclosed switches. Fusible switches also suitable as service entrance when neutral bonded to the enclosure is installed. Meets CSA C22.2 No.4 Enclosed Switches. Meet NEMA standard KS-1-2001 for type GD switches.	CSA certified under file #24563 as enclosed switches. Meets CSA C22.2 No.4 Enclosed Switches. Meet NEMA standard KS-1-2001 for type HD switches.	CSA certified under file #24563 as enclosed switches. Meets CSA C22.2 No.4 Enclosed switches. Meet NEMA standard KS-1-2001 type HD for "DT" switches.																																	
Seismic Qualifications	All GD & HD switches and "DT" type double throw switches have been tested and comply with the 2010 California Building Code (CBC) and with the 2009 International Building Code (IBC) - Compliance Level SDS = 1.85 g																																			
Groundable Neutral (All neutrals are bondable for service entrance use.)	Fusible switches have groundable neutral blocks factory installed.	All switches (both Fusible and Non-Fusible) are either supplied with factory installed neutrals or accept field addable neutrals.	All 2-3 pole DT will accept field addable neutrals.																																	
Padlocks	Padlockable cover latch. OFF padlock provisions on handle.	Padlockable cover latch and multiple OFF padlock provisions on handle.	Padlockable cover latch and multiple OFF padlock provisions on handle.																																	
HP & Load Break Ratings	All General Duty, Heavy Duty and Double Throw Switches are both load break and horsepower rated.																																			

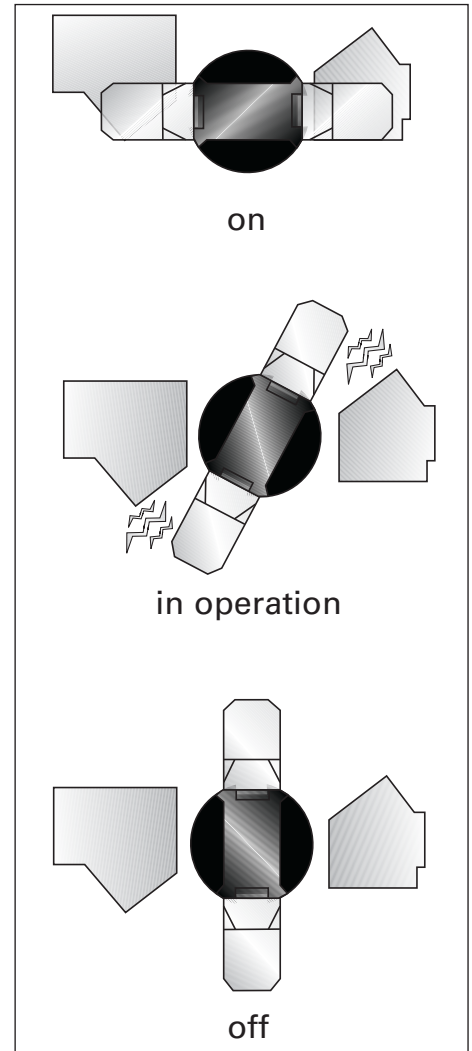
① The protective device can either be a fuse installed in a fusible switch or an upstream fuse or circuit breaker protecting a non-fusible switch. The ampere rating of the upstream protective device must not exceed the switch ampere rating.

② 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 CSA and CEC wire-bending space requirements
▪	▪	▪	Lugs suitable for copper or aluminum at 60° or 75°C
▪	▪	▪	CU/AL wire lugs that meet CSA C22.2 No.65-03 requirements
–	▪	▪	Suitable for field-convertible compression connectors
▪ ^④	▪	▪	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}	▪ ^{①⑦}	Provisions for CSA Class T, R and H Fuses
–	▪	▪ ^①	Provisions for CSA Class J and L Fuses
–	▪	▪	Metal nameplate
60-200A	▪	▪	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.

② 400, 600V & 600A fusible, double-throw switches accept only Class J or T fuses. Only 800 & 1200A HD switches will accept Class L fuses.

③ 30A general duty switches have fuse clips constructed of spring type copper.

④ Not supplied on 30A outdoor & plug fuse switches.

⑤ 30-200A Type VBII in stainless steel enclosures.

⑥ 60-200A.

⑦ 200A general duty switches have aluminum neutral assemblies.

⑧ 100-200A GD, 100-600A DT and 100-1200A HD switches will accept Class T fuses.

Safety Switches

General Duty and Heavy Duty

Product Overview

Enclosure Types

- A 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.
- C 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.
- D 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.



Load Break Ratings

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

Switch Ampere Rating	Number of ON/OFF Operations per Minute	Number of Operations		
		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. The assignment of such ratings is made by CSA 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 Breaker^{②③}

Breaker Frame	Non-Fused Switch	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 DT (240V)	18 kA Thru 240 VAC
JD6-A, LD6-A	400A HD & DT (600V)	18 kA Thru 600 VAC
LD6-A	600A DT (240V)	25kA Thru 240 VAC
LD6-A	600A HD & DT (600V)	25kA Thru 600 VAC
NNG	1200A HD (600V)	25 kA Thru 600 VAC

① 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 CSA certified or cUL Listed CB

③ Circuit breaker trip rating must not exceed switch ampere rating

Catalogue Numbering System

Type VBII Safety Switch Catalogue Numbering System

Product Overview

H F C 3 6 4 N R CH

Switch Type

L = General Duty
10k AIC Max.
(Plug Fused &
60A Max
Non-Fused)
G = Gen. Duty
H = Heavy Duty
DT = Double Throw

Special Applications With:

CH = Crouse-Hinds Receptacle
W = Viewing Window

Fused or Non-Fused

F = Fused
NF = Non-Fused

Enclosure Type

Omit = Type 1, Indoor
R = Type 3R, Outdoor
S = Type 4/4X, Stainless Steel
J = Type 12, Industrial

C = Built to meet Canadian requirements

Number of Poles

1 = 1
2 = 2
3 = 3
4 = 4
6 = 6

With or Without Neutral

Omit = Less Neutral
N = With Neutral

Voltage

1 = 120V or 120/240V
2 = 240V
6 = 600V

Amperes

1 = 30A **5** = 400A
2 = 60A **6** = 600A
3 = 100A **7** = 800A
4 = 200A **8** = 1200A

Type VBII Accessories Catalogue Numbering System

H R 6 4

Switch Type

H = Heavy Duty
G = General Duty

Amperes

1 = 30A
2 = 60A
12 = 30/60A
3 = 100A
23 = 60/100A
1234 = 30/60/100/200A
4 = 200A
56 = 400/600A
5678 = 400/600/800/1200A
78 = 800/1200A

Accessory Type

A1 = Auxiliary Switch 1/NO and 1/NC
A2 = Auxiliary Switch 2/NO and 2/NC
A3 = Auxiliary Switch Low Current
CL = Compression Lug Barrier /
Mounting Kit
G = Ground Lug Kit
G2 = Insulated Ground Lug Kit
LC = Copper Lug Kit
NC = Neutral
NC2 = 200% Neutral
P = Fuse Puller Kit
R = Class R - Fuse Clip Kit
T = Class T - Fuse Kit

Maximum Voltage

2 = 240V Max
6 = 600V Max

Heavy Duty Safety Switches

Selection

1
SAFETY
SWITCHES



System	Ampere Rating	Indoor – Type 1		Outdoor – Type 3R			Horsepower Ratings ^②				
		Catalogue Number	Ship. Wt. (lbs.) Std. Pkg.	Catalogue Number	Ship. Wt. (lbs.) Std. Pkg.	Hub Type ^③	240V AC				250 Volt DC
							1-Phase, 2-Wire		3-Phase, 3-Wire		
Std.	Max.	Std.	Max.								

240 Volt Fusible^①

2-Pole, 2-Fuse and Solid Neutral^③ (Also used for 2-Pole, 2-Wire Applications) 240 Volt AC/250 Volt DC

Ampere Rating	Indoor Type 1 Catalogue Number	Indoor Type 1 Ship. Wt. (lbs.) Std. Pkg.	Outdoor Type 3R Catalogue Number	Outdoor Type 3R Ship. Wt. (lbs.) Std. Pkg.	Hub Type ^③	1-Phase, 2-Wire		3-Phase, 3-Wire		250 Volt DC
						Std.	Max.	Std.	Max.	
30	HFC221N	12	HFC221NR	13	ECHS	1 ^{1/2}	3	3	7 ^{1/2}	5
60	HFC222N	18	HFC222NR	19		3	10	7 ^{1/2}	15	10
100	HFC223N	23	HFC223NR	24	ECHV	7 ^{1/2}	15	15	30	20
200	HFC224N	47	HFC224NR	48		15	—	25	60	40
400	HFC225N	153	HFC225NR	157		15	—	50	125	50
600	HFC226N	155	HFC226NR	159		15	—	75	200	50
800	HFC227N	365	HFC227NR	365	—	—	100	250	50	
1200	HFC228N	385	HFC228NR	385	—	—	100	250	50	

3-Pole, 3-Fuse and Solid Neutral (Also used for 3-Pole, 3-Wire Applications) 240 Volt AC/250 Volt DC

Ampere Rating	Indoor Type 1 Catalogue Number	Indoor Type 1 Ship. Wt. (lbs.) Std. Pkg.	Outdoor Type 3R Catalogue Number	Outdoor Type 3R Ship. Wt. (lbs.) Std. Pkg.	Hub Type ^③	1-Phase, 2-Wire		3-Phase, 3-Wire		250 Volt DC
						Std.	Max.	Std.	Max.	
30	HFC321N	14	HFC321NR	15	ECHS	1 ^{1/2}	3	3	7 ^{1/2}	5
60	HFC322N	19	HFC322NR	20		3	10	7 ^{1/2}	15	10
100	HFC323N	25	HFC323NR	26	ECHV	7 ^{1/2}	15	15	30	20
200	HFC324N	49	HFC324NR	50		15	—	25	60	40
400	HFC325N	158	HFC325NR	162		15	—	50	125	50
600	HFC326N	161	HFC326NR	165		15	—	75	200	50
800	HFC327N	375	HFC327NR	375	—	—	100	250	50	
1200	HFC328N■	395	HFC328NR■	388	—	—	100	250	50	

240 Volt Fusible

2-Pole, 2-Fuse^④ 240 Volt AC/250 Volt DC

Ampere Rating	Type 4/4X Stainless ^②		Type 12 Industrial ^⑤		Hub Type ^⑥	1-Phase, 2-Wire		3-Phase, 3-Wire		250 Volt DC
	Catalogue Number	Ship. Wt. (lbs.) Std. Pkg.	Catalogue Number	Ship. Wt. (lbs.) Std. Pkg.		Std.	Max.	Std.	Max.	
30	HFC221S	13	HFC221J	13	SSH	1 ^{1/2}	3	3	7 ^{1/2}	5
60	HFC222S	19	HFC222J	19		3	10	7 ^{1/2}	15	10
100	HFC223S	24	HFC223J	24		7 ^{1/2}	15	15	30	20
200	HFC224S	48	HFC224J	48		15	—	25	60	40

3-Pole, 3-Fuse^④ (Also used for 2-Pole, 2-Wire Applications in 400–800A Ratings) 240 Volt AC/250 Volt DC

Ampere Rating	Type 4/4X Stainless ^②		Type 12 Industrial ^⑤		Hub Type ^⑥	1-Phase, 2-Wire		3-Phase, 3-Wire		250 Volt DC
	Catalogue Number	Ship. Wt. (lbs.) Std. Pkg.	Catalogue Number	Ship. Wt. (lbs.) Std. Pkg.		Std.	Max.	Std.	Max.	
30	HFC321S	14	HFC321J	14	SSH	1 ^{1/2}	3	3	7 ^{1/2}	5
60	HFC322S	20	HFC322J	20		3	10	7 ^{1/2}	15	10
100	HFC323S	25	HFC323J	25		7 ^{1/2}	15	15	30	20
200	HFC324S	49	HFC324J	49		15	—	25	60	40
400	HFC325S	154	HFC325J■	110	*	15	—	50	125	50
600	HFC326S	157	HFC326J■	161		15	—	75	200	50
800	HFC327S■	370	HFC327J■	365		—	—	100	250	50

■ Built to order.

① Suitable for use as service equipment when neutral is bonded to the enclosure.

② Dual horsepower ratings: Std.- applies when non-time delay fuses are installed. Max.- applies when time-delay fuses are installed.

③ These switches are CSA certified for application on grounded B-phase systems and are suitable for 3-phase motor applications.

④ When a neutral is required use neutral kit displayed on p.1-19

⑤ Hub catalogue numbers available p. 1-21

⑥ Also rated for Type 3S/3R application. Factory provided drain plug must be removed from the bottom of the enclosure for type 3S/3R application.

⑦ 304 grade stainless steel.

⑧ Hub type SSH are suitable for type 4/4X and type 12 applications.

* Consult Siemens representative.

General and Heavy Duty Safety Switches

Dimensions

Safety Switch Dimensions & Shipping Weights

SAFETY SWITCHES 1

Catalogue Number	Height - Inches (mm)			Width - Inches (mm)		Depth - Inches (mm)		Knockout Diagram ^①	Shipping Weight (lbs.)
	Box A	With Door B	With Rain Shed C	Box D	With Handle E	Box F	With Handle G		
HFC223S	21.96 (558)	23.16 (508)	—	9.65 (245)	12.02 (305)	5.34 (136)	10.46 (266)	—	24
HFC224J	29.96 (761)	31.07 (789)	—	14.62 (371)	16.95 (431)	6.63 (168)	12.58 (269)	—	48
HFC224N	29.90 (760)	31.07 (789)	—	14.62 (371)	16.98 (431)	6.36 (162)	12.33 (313)	S12	47
HFC224NR	29.90 (760)	—	31.42 (798)	14.61 (371)	16.99 (432)	6.36 (162)	12.33 (313)	S13	48
HFC224S	29.96 (761)	31.07 (789)	—	14.62 (371)	16.95 (431)	6.63 (168)	12.58 (269)	—	48
HFC225N	56.00 (1422)	56.57 (1183)	—	24.65 (626)	26.21 (666)	9.23 (234)	14.68 (373)	S14	153
HFC225NR	56.07 (1424)	—	57.19 (1453)	24.65 (626)	26.70 (678)	9.23 (234)	14.68 (373)	S15	162
HFC226N	56.00 (1422)	56.57 (1183)	—	24.65 (626)	26.21 (666)	9.23 (234)	14.68 (373)	S14	155
HFC226NR	56.07 (1429)	—	57.19 (1453)	24.65 (626)	26.70 (678)	9.23 (234)	14.68 (373)	S15	159
HFC227N	66.67 (1693)	67.16 (1706)	—	38.40 (975)	39.96 (1015)	9.24 (235)	14.68 (373)	—	360
HFC227NR	66.67 (1693)	—	67.74 (1721)	38.40 (975)	39.96 (1015)	9.24 (235)	14.68 (373)	—	362
HFC228N	66.67 (1693)	67.16 (1706)	—	38.40 (975)	39.96 (1015)	9.24 (235)	14.68 (373)	—	352
HFC228NR	66.67 (1693)	—	67.74 (1721)	38.40 (975)	39.96 (1015)	9.24 (235)	14.68 (373)	—	364
HFC265	56.00 (1422)	56.57 (1183)	—	24.65 (626)	26.21 (666)	9.23 (234)	14.68 (373)	S14	149
HFC265J	56.14 (1426)	56.57 (1183)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.64 (372)	—	155
HFC265R	56.07 (1424)	—	57.19 (1453)	24.65 (626)	26.70 (678)	9.23 (234)	14.68 (373)	S15	152
HFC265S	56.14 (1426)	56.57 (1183)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.64 (372)	—	153
HFC266	56.00 (1422)	56.57 (1183)	—	24.65 (626)	26.21 (666)	9.23 (234)	14.68 (373)	S14	155
HFC266J	56.14 (1426)	56.57 (1183)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.68 (373)	—	156
HFC266R	56.07 (1424)	—	57.19 (1453)	24.65 (626)	26.70 (678)	9.23 (234)	14.68 (373)	S15	155
HFC266S	56.14 (1426)	56.57 (1183)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.68 (373)	—	161
HFC321J	14.27 (363)	17.33 (440)	—	6.65 (169)	9.02 (229)	5.32 (135)	10.46 (266)	—	14
HFC321N	14.26 (362)	15.45 (392)	—	6.64 (169)	9.01 (229)	5.05 (128)	10.17 (258)	S6	14
HFC321NR	14.39 (366)	—	15.77 (401)	6.64 (169)	9.01 (229)	5.05 (128)	10.17 (258)	S8	15
HFC321S	14.27 (363)	17.33 (440)	—	6.65 (169)	9.02 (229)	5.32 (135)	10.46 (266)	—	14
HFC322J	16.27 (413)	19.31 (490)	—	9.17 (233)	11.47 (291)	5.33 (135)	10.46 (266)	—	20
HFC322N	16.26 (413)	17.46 (443)	—	9.15 (232)	11.53 (293)	5.05 (128)	10.17 (258)	S16	19
HFC322NR	16.26 (413)	—	17.77 (451)	9.16 (233)	11.53 (293)	5.05 (128)	10.17 (258)	S17	20
HFC322S	16.27 (413)	19.31 (440)	—	9.17 (233)	11.47 (291)	5.33 (135)	10.46 (266)	—	20
HFC323J	21.96 (558)	23.16 (588)	—	9.65 (245)	12.02 (305)	5.34 (136)	10.46 (266)	—	25
HFC323N	21.96 (558)	23.15 (588)	—	6.64 (169)	12.01 (305)	5.05 (128)	10.17 (258)	S10	25
HFC323NR	21.95 (558)	—	23.46 (596)	6.64 (169)	11.97 (304)	5.05 (128)	10.17 (258)	S11	26
HFC323S	21.96 (558)	23.16 (588)	—	9.65 (245)	12.02 (305)	5.34 (136)	10.46 (266)	—	25
HFC324J	29.96 (761)	31.07 (789)	—	14.62 (371)	16.95 (431)	6.63 (168)	12.58 (269)	—	49
HFC324N	29.90 (760)	31.07 (789)	—	14.62 (371)	16.98 (431)	6.36 (162)	12.33 (313)	S12	49
HFC324NR	29.90 (760)	—	31.42 (798)	14.61 (371)	16.99 (432)	6.36 (162)	12.33 (313)	S13	50
HFC324S	21.96 (558)	31.07 (789)	—	14.62 (371)	16.95 (431)	6.63 (168)	12.58 (269)	—	49
HFC325J	56.14 (1426)	56.57 (1183)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.64 (372)	S14	160
HFC325N	56.00 (1422)	56.57 (1183)	—	24.65 (626)	26.21 (666)	9.23 (234)	14.68 (373)	S14	158
HFC325NR	56.07 (1424)	—	57.19 (1453)	24.65 (626)	26.70 (678)	9.23 (234)	14.68 (373)	S15	162
HFC325S	56.14 (1426)	56.57 (1183)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.64 (372)	—	158
HFC326J	56.14 (1426)	56.57 (1183)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.64 (372)	—	161
HFC326N	56.00 (1422)	56.57 (1183)	—	24.64 (626)	26.21 (666)	9.23 (234)	14.68 (373)	S14	161
HFC326NR	56.07 (1424)	—	57.19 (1453)	24.64 (626)	26.70 (678)	9.23 (234)	14.68 (373)	S15	165
HFC326S	56.14 (1426)	56.67 (1183)	—	24.82 (630)	26.44 (672)	9.19 (233)	14.64 (372)	—	161
HFC327J	66.67 (1693)	67.16 (1706)	—	38.40 (975)	39.96 (1015)	9.24 (235)	14.68 (373)	—	367
HFC327N	66.67 (1693)	67.16 (1706)	—	38.40 (975)	39.96 (1015)	9.24 (235)	14.68 (373)	—	380
HFC327NR	66.67 (1693)	—	64.74 (1721)	38.40 (975)	40.25 (1022)	9.24 (235)	14.68 (373)	—	383
HFC327S	66.67 (1693)	67.16 (1706)	—	38.40 (975)	39.96 (1015)	9.24 (235)	14.68 (373)	—	367
HFC328N	66.67 (1693)	67.16 (1706)	—	38.40 (975)	39.96 (1015)	9.24 (235)	14.68 (373)	—	382
HFC328NR	66.67 (1693)	—	67.74 (1721)	38.40 (975)	40.25 (1022)	9.24 (235)	14.68 (373)	—	385
HFC361	14.26 (302)	15.45 (1545)	—	6.64 (169)	9.01 (229)	5.05 (128)	10.17 (258)	S6	14
HFC361J, JW	14.27 (413)	17.33 (440)	—	6.65 (245)	9.02 (229)	5.32 (135)	10.46 (266)	—	14
HFC361N	14.26 (362)	15.45 (1545)	—	6.64 (169)	9.01 (229)	5.05 (128)	10.17 (258)	S6	14
HFC361NR	14.39 (366)	—	15.77 (401)	6.64 (169)	9.01 (229)	5.05 (128)	10.17 (258)	S8	15
HFC361R	14.39 (366)	—	15.77 (401)	6.64 (169)	9.01 (229)	5.05 (128)	10.17 (258)	S8	15
HFC361S, SW	14.27 (413)	17.33 (440)	—	6.65 (245)	9.02 (229)	5.32 (135)	10.46 (266)	—	15
HFC362	16.26 (413)	17.46 (443)	—	9.15 (232)	11.53 (313)	5.05 (128)	10.17 (258)	S16	19

① Knocks not provided on Type 4/4X and 12 or on 800 & 1200A switches.