

Type VBII Disconnect Switches

30 – 600A, Fusible and Non-Fusible

Contents	1
Description	1
Catalog Numbering System	1
Features	2
Ordering Information	2
Switch Selection	3
Handle and Linkage Kit Selection	3
Accessories Selection	4 – 5
UL and CSA Characteristics	6
Crimp Lug Application Data	7
Lug Wire Ranges	
Switch Dimensions	8
Handle Mounting and	9 – 10
Cutout Dimensions	
Replacement Parts	11

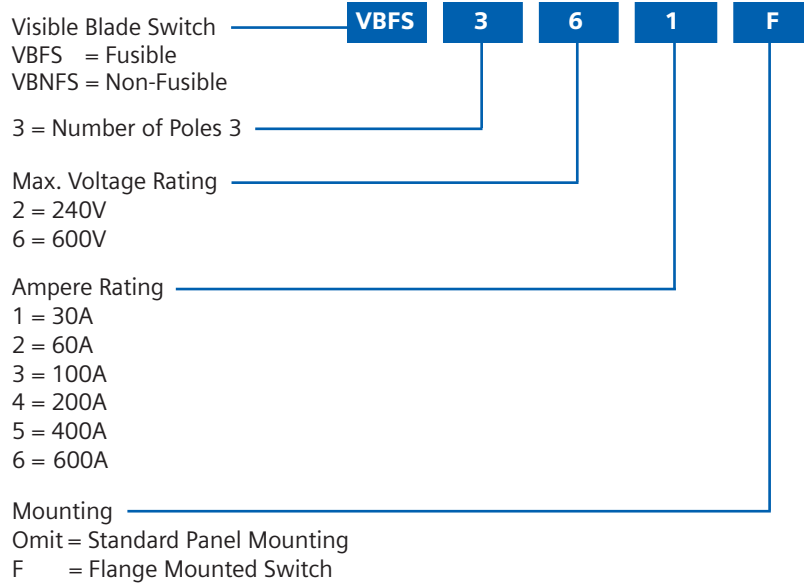
Description

Siemens Type VBII visible blade disconnect switches meet UL98 requirements and can be used in either service entrance or branch circuit applications. 30-600A, 3-pole switches are offered in both fusible and non-fusible versions. They are rated 240V AC or 600V AC or DC max. All are load break and horsepower rated. Fusible switches are factory supplied with Class H fuse provisions and can be field converted to accept Class R fuses only. 600V fusible switches can also be easily converted to accept Class J fuses.

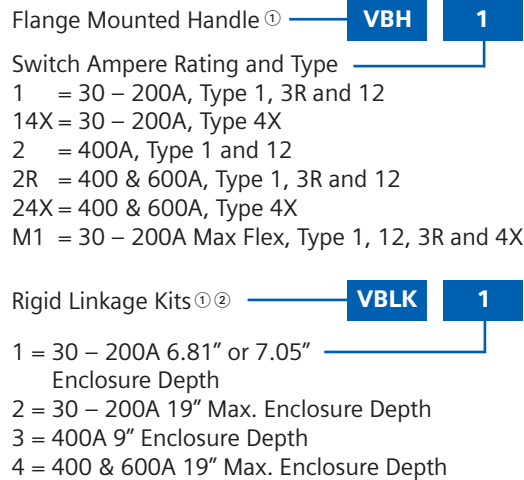
All have flange mounted operating handles rated for Type 1, 3R, 4X, or 12 applications. Panel mounted switches allow for variable depth with either rigid shaft drive in all ratings or with cable drive in 30-200A ratings. Labor saving flange mounted switch assemblies are also available in 30-200A ratings.

All are UL recognized under file number E121152 Vol. 3 and CSA certified under file number 154852.

Catalog Numbering System for Switch Assemblies



Catalog Numbering System for Operating Handles and Linkage Kits



① Supplied as standard on flange mounted switches.

② Use cable kit in lieu of Rigid Linkage Kit for Max-Flex operated switches.



VBFS361, VBH1 and VBLK2

Type VBII Disconnect Switches Switch, Handle and Linkage Kit Selection

Switches

Switch Ampere Rating	Max. AC Voltage Rating	Catalog Number	Horsepower Rating, Switches and 3 Phase ^①						600 Volts DC (max) ^①
			240 Volts AC		480 Volts AC		600 Volts AC		
			Standard	Max	Standard	Max.	Standard	Max.	
Fusible Panel Mounted Variable Depth Switches - 3 Pole ^②									
30	240	VBFS321	3	7 1/2	—	—	—	—	— ^③
60	240	VBFS322	7 1/2	15	—	—	—	—	— ^④
30	600	VBFS361	—	—	5	15	7 1/2	20	15 ^⑤
60	600	VBFS362	—	—	15	30	15	50	30 ^⑤
100	600	VBFS363	—	—	25	60	30	75	50 ^⑤
200	600	VBFS364	—	—	50	125	60	150	50
400	600	VBFS365	—	—	100	250	125	350	— ^⑦
600	600	VBFS366	—	—	150	400	200	500	— ^⑦
Non-Fusible Panel Mounted Variable Depth Switches - 3 Pole ^②									
30	600	VBNS361	—	10	—	20	—	30	15 ^⑤
60	600	VBNS362	—	20	—	50	—	60	30 ^⑤
100	600	VBNS363	—	40	—	75	—	100	50 ^⑤
200	600	VBNS364	—	60	—	125	—	150	50
400	600	VBNS365	—	125	—	250	—	350	— ^⑦
600	600	VBNS366	—	200	—	400	—	500	— ^⑦
Fusible Flange Mounted Switches - 3 Pole (Includes Type 1, 3R and 12 Rated Operating Handle) ^⑥									
30	240	VBFS321F	3	7 1/2	—	—	—	—	— ^③
60	240	VBFS322F	7 1/2	15	—	—	—	—	— ^④
30	600	VBFS361F	—	—	5	15	7 1/2	20	15 ^⑤
60	600	VBFS362F	—	—	15	30	15	50	30 ^⑤
100	600	VBFS363F	—	—	60	60	30	75	50 ^⑤
200	600	VBFS364F	—	—	100	125	60	150	50
Non-Fusible Flange Mounted Switches - 3 Pole (Includes Type 1, 3R and 12 Rated Operating Handle) ^⑥									
30	600	VBNS361F	—	10	—	20	—	30	15 ^⑤
60	600	VBNS362F	—	20	—	50	—	60	30 ^⑤
100	600	VBNS363F	—	40	—	75	—	100	50 ^⑤
200	600	VBNS364F	—	30	—	125	—	150	50

Note: Fusible switches include fuse provisions for class H fuses. The load base can be moved to pre-drilled holes for class J fuses. If Class R fuses are required, add a Class R fuse clip kit.

① Std. – applies when non-time delay fuses are used. Max. – applies when time delay fuses are used.

② Includes line base, load base, operating mechanism and line and load lugs. Select operating handle and linkage kits from tables on this page.

③ Rated 5 HP at 250V DC.

④ Rated 10 HP at 250V DC.

⑤ 600V DC voltage and 600 V DC horsepower rating shown requires (2) poles to be connected in series.

⑥ Includes line base, load base, operating mechanism, line and load lugs, operating handle and required linkage.

⑦ Rated 250V DC max.

Flange Mounted Operating Handles

For use with panel mounted switches. Included with flange mounted switches as standard.

Catalog Number	Handle Assembly Description
VBH1	30 – 200A Type 1, 3R and 12
VBH14X	30 – 200A Type 4X
VBH2	400A Type 1 and 12
VBH2R	400 & 600A Type 1, 3R and 12
VBH24X	400 & 600A Type 4X

Max-Flex™ Handle and Adapter Kit

(Type 1, 12, 3R and 4X) Use with 30 – 200A panel mounted switches and cable kit.

Catalog Number	Description
VBHM1	30 – 200A Max-Flex Adapter Kit

Cable Kit

For use with 30-200A panel mounted switches and Max-Flex handle and adapter kit.

Catalog Number	Description
FHOEC036	36" Long Drive Cable
FHOEC048	48" Long Drive Cable



VBNS361, VBHM1 and FHOEC036

Rigid Linkage Kits

For use with Panel Mounted Switches. Not required for Flange Mounted Switches.

Catalog Number	Switch Ampere Rating	Enclosure Depth ^①	
		Min.	Max.
VBLK1	30 – 200	6.81 ^②	6.81 ^②
VBLK2	30 – 200	6.81	19.0
VBLK3	400	9.0	9.0
VBLK4	400 & 600	9.0	19.0

① Dimensions (min and max) from enclosure mounting pan to outside surface of enclosure handle mounting flange.

② 7.05 for 200A switches.

Type VBII Disconnect Switches Accessories

Class R Fuse Clip Kits

These kits prevent the installation of Class H and K fuses (one kit required per switch).

Catalog Number	Description
HR21	30A, 240V Kit (HD only)
HR612	30A, 600V Kit/60A, 240V Kit
HR62	60A, 600V Kit
HR63	100A Kit
HR64	200A Kit
HR656	400A/600A Kit

Class J Fuse Provisions

All 30-600A, 600V fusible switches are field convertible to accept Class J fuses by moving the load base to a pre-drilled J fuse position.

Class T Fuse Adapter Kits

100-600A fusible switches are field convertible to accept Class T fuses. 400-600A switches are field convertible to accept Class T fuses by moving the load base to a pre-drilled fuse position.

Class T Fuse Adapter Kits ①

Catalog Number	Description
HT23	100A, 240V Kit
HT63	100A, 600V Kit
HT24	200A, 240V Kit
HT64	200A, 600V Kit

■ Built to order. Allow 6-8 weeks for delivery.

① One kit per pole required.

UL Neutral Kits

Standard neutral kits can be field installed in 30-100A switches.

Switch Ampere Rating	Kit Catalog Number
30A, 600V, 60A 240 V	HN612
60A, 600V & 100A	HN63

Window Kits (Type 1, 12, 3R and 4X)

Allows viewing of visible blades and of indicating fuses through 200A.

Catalog Number	Description
VBWK1	30A Window Kit
VBWK2	60 and 100A Window Kit
VBWK3	200-600A Window Kit

200% Neutral Kits

UL listed 200%, neutrals are available for 100 and 200A switches. They are typically used with non-linear transformers or where increased neutral ampacity/lug capacity is required.

Switch Ampere Rating	Kit Catalog Number	Wire Range Line & Load Lugs (Cu/Al)
100	HN263	(2) #14 – 1/0 AWG
200	HN264	(2) #6 AWG – 300 Kcmil



HR612



HT63



HN612

Type VBII Disconnect Switches

Accessories



HA161234



HA261234



HP61



HLC612

Auxiliary Contacts

The auxiliary contacts are available in one normally open and one normally closed or two normally open and two normally closed configurations. Siemens offers a PLC Auxiliary Switch (30-200A) that has very low resistance for low voltage and current typical in PLC circuits. Auxiliary contacts make after and break before main switch contacts.

Switch Ampere Rating	Aux. Switch Catalog Number	Kit Ampere Rating			Kit Horsepower Rating		
		125V AC Max.	250V AC Max.	28V DC Max.	125V AC Max.	250V AC Max.	28V DC Max.
With 1 NO and 1 NC Isolated Contacts							
30-200	HA161234	10	10	—	1/2	3/4	—
400-600	HA165678	10	10	—	1/2	3/4	—
With 2 NO and 2 NC Isolated Contacts							
30-200	HA261234	10	10	7	1/2	3/4	—
400-600	HA265678	10	10	7	1/2	3/4	—
Low Current PLC Type with 1 NO and 1 NC Gold Plated Contacts							
30-200	HA361234	10	10	—	1/2	3/4	—
400-600	HA365678	10	10	—	1/2	3/4	—

Internal Door Latch Kits

For use with enclosures with door mounted latching bar. Required when a flange mounted switch is mounted in a Hoffmann or Rittal enclosure provided with an AB cutout.

Catalog Number	Description
DKR2	2 Point (For use with enclosures less than 40" high)
DKR3	3 Point (For use with enclosures 40" or larger in height)

Fuse Puller Kits

Fuse puller kits are field installable in 30 – 100A switches (one kit required per 3-pole switch).

Switch Ampere Rating	Fuse Puller Kit Catalog Number
30	HP61
60	HP62 ■
100	HP63 ■

Copper Lug Kits

All switches are UL approved to accept field installed copper lug kits.

Switch Ampere Rating	Copper Lug Catalog Number	Description
30-60	HLC612	(9) Lugs/Kit #14 – 4 AWG Cu
100	HLC63 ■	(9) Lugs/Kit #14 – 1/0 AWG Cu
200	HLC64 ■	(9) Lugs/Kit #6 AWG – 300 Kcmil Cu
400 – 600A	HLC65678	(1) Lugs/Kit #1/0 AWG – 600 Kcmil Cu

Equipment Ground Kits

Equipment ground lug kits are available for all switches.

Switch Ampere Rating	Catalog Number	Number of Terminals	Wire Range Per Terminal (Cu/Al)
30-200	HG61234	2	#14 – 4 AWG
400 & 600	HG656	4	#6 AWG – 250 Kcmil

■ Built to order. Allow 6-8 weeks for delivery.

Type VBII Disconnect Switches

Technical Characteristics

UL and CSA Technical Characteristics

Description	Switch Ampere Rating					
	30	60	100	200	400	600
AC Short Circuit Rating ^①						
with Class H Fuses	10kA	10kA	10kA	10kA	10kA	10kA
with Class R or J Fuses	200kA	200kA	200kA	200kA	200kA	200kA
with Class T Fuses	—	—	200kA	200kA	200kA	200kA
Maximum Horsepower Rating ^②						
Fusible Switches						
240V AC	7.5	15	30	60	125	200
480V AC	15	30	60	125	250	400
600V AC	20	50	75	150	350	500
600V DC	15 ^③	30 ^③	50 ^③	50	— ^⑥	— ^⑥
Non-Fusible Switches ^②						
240V AC	10	20	40	60	125	200
480V AC	20	50	75	125	250	400
600V AC	30	60	100	150	350	500
600V DC	15 ^③	30 ^③	50 ^③	50	— ^⑥	— ^⑥
Electrical Endurance	6000	6000	6000	6000	1000	1000
Mechanical Endurance	10000	10000	10000	8000	6000	5000
Recommended Minimum Outside Enclosure Dimension (inches) (May not meet UL side gutter space requirements when maximum wire size is used or when a neutral is required.)						
Fusible	Height	14.38	16.38	22.00	30.00	56.00
	Width	8.44	9.68	9.68	14.62	24.65
	Depth ^④	7.00	7.00	7.00	7.25	9.25
Non-Fusible	Height	13.25 ^⑤	16.38	22.00	30.00	44.00
	Width	8.44	9.68	9.68	14.62	24.65
	Depth ^④	7.00	7.00	7.00	7.25	9.25

^① Ratings apply to fusible switches and also to non-fusible switches when protected by fuses. Non-fusible switches are also rated 10kA when protected by a circuit breaker. The ampere rating of a CB or fuses protecting a non-fusible switch must not exceed the switch ampere rating.

^② All AC horsepower ratings shown are for 3-phase motor loads.

^③ 600V DC horsepower rating shown requires (2) poles to be connected in series.

^④ Mounting pan to inside surface of handle mounting flange.

^⑤ 11.25 for panel mounted switch catalog number VBNFS361.

^⑥ Rated 250V DC max.

Enclosure Compatibility

Siemens Type VBII disconnects in 30 – 200A ratings are designed to mount in certain Hoffman and

Rittal disconnect enclosures with no modification to the handle cutout provided in the enclosure as follows.

Panel Mounted 30 – 200A Disconnects

Hoffman (Catalog numbers starting with)	Rittal (Catalog numbers starting with)
Type 12, A __ SA ^⑥	Type 12, E __ SA ^⑥
Type 12 A __ X ^⑥ Type 4, A __ HS	Type 4, E __ HS
Wall mount, C – DSC	

Flange Mounted 30 – 200A Disconnects

Hoffman (Catalog numbers starting with)	Rittal (Catalog numbers starting with)
Type 12, A __ AB ^⑥	Type 12, E __ AB ^⑥
Type 12, A __ SA ^⑥ ^⑦	Type 12, E __ SA ^⑥ ^⑦
Wall mount, C – DSC ^⑦	

Note: These tables above provide a partial listing. Additional enclosures are available which provide a handle cut-out that is compatible with 30 – 200A VB disconnects.

^⑥ Requires internal door latch kit DKR2 or DKR3.

^⑦ Requires handle to be removed to install.

^⑧ Requires Hoffman supplied universal adapter kit.

Type VBII Disconnect Switches

Crimp and Lug Wire Range Application Data

All VBII Disconnect Switches are UL approved to accept the following field installed compression lugs.

Switch Setting	Wire Size	Burdndy		Thomas-Betts		IIsco						
		CU Only	CU/AL	CU ONLY	CU/AL	CU ONLY	CU/AL					
30A	#14 – 10					60096 60097						
	#8	YA8C-L Box YA8C-L1 Box		54104 54130		60101 60102 61102	CRA-8	ACL-8 ACN-8				
	#6					61107						
60A	#8	YA8C-L1 Box YA8C-TC14	YA8CA3	54130 54930BE		60102 61102		ACL-8				
	#6	YA6C-L Box YA6C	YA6CA1	54105 54905BE		60107 61107	CRB-6 CRB-6L	ACL-6				
	#4			54106		61112	CRB-4					
100A	#4	YA4C-L Box	YA4C	YA4CA1	54106	54906BE	61112	60112	CRB-4	CRB-4L	ACL-4	
	#2	YA2C-L2 Box	YA2C	YA2CA5	54107		61116		CRB-2	CRB-2L	ACL-2	
	#1	YA1C-L2	YA1C	—	54108	54947BE	61122		CRBB-1-14	CRA-1L	—	
	1/0	—	—	—	—	—	61130		—	—	—	
200A	#2	YA2C-L Box	YA2C	YA2CA1	54142-TB		60117		CRB-2	CRB-2L	IACL-2	ACN-2
	#1	YA1C-L Box	YA1C	YA1CA1	54147	54947BE	60123		CRA-1-38	CRA-1L	ACN-1	
	1/0	YA25-L Box	YA25	YA25A1	54153-TB	54949BE	60129	61130	CRA-0	CRA-1/0L	IACL-1/0	ACN-1-0
	2/0	YA26-L3	YA26	YA26A6	54158	54910BE 256-30695-1229	60135	61136	CRA-2/0	CRA-2/0L	ACL-2/0 IACL-2/0	
	3/0	YA27-L3	YA27	YA27A1	54163-TB		60141	61142	CRC-3/0	CRB-3/0L	IACL-3/0	ACL-3/0
	4/0	YA28-L3 YA28-TC38		YA28A1	54168	256-30695-1253	61148		CRC-4/0	CRB-4/0L	IACL-4/0	ACL-4/0
	250 Kcmil	YA29-L7	—	—	54173	54913BE	61156		CRA-250	CRA-250L	IACL-250	
	300 Kcmil	—	—	—	—	—	61162		—	—	—	
400 & 600A	2/0	YA26-N		YA26-A1	54160	54951BE	—		—	—	IACL-2/0	ACN-2/0
	3/0	YA27-L Box	YA27	YA27A3	54165-TB	54965BE	—		CRB-3/0	CRB-3/0L	IACL-3/0	ACN-3/0
	4/0	YA28-L Box	YA28	YA28A3	54170	54970BE	60150		CRB-4/0	CRB-4/0L	IACL-4/0	ACN-4/0
	250 Kcmil	YA29-L Box	YA29	YA29A1	54113	54913BE	61156	60156	CRA-250	CRA-250L	IACL-250	ACL-250
	300 Kcmil	YA30-L	YA30	YA30A1	54414	54914BE	61162	60162	CRA-300	CRA-300L	IACL-300	ACL-300
	350 Kcmil	YA31-L	YA31	YA31A1		54915BE	61165	60165	CRA-350	CRA-350L	IACL-350	—
	400 Kcmil	YA32-N		—	54116	54916BE	—		—	—	—	
500 Kcmil	YA34-L6	YA34-N	—	—	—	61171		—	—	IACL-500		

Lugs

30 and 60A switches are suitable for use with 60° or 75°C wire. 100-600A switches are suitable for use with 75°C rated wire.

Wire Ranges (Line, Load and Standard Neutral)

Switch Ampere Rating	UL Approved Wire Range	Lug Wire Range
30	#14 – 6 AWG (Cu/Al)	#14 – 2 AWG (Cu/Al)
60	#14 – 2 AWG (Cu/Al)	#14 – 2 AWG (Cu/Al)
100	#14 – 1/0 AWG (Cu/Al)	#14 – 1/0 AWG (Cu/Al)
200	#6 AWG-300 Kcmil (Cu/Al)	#6 AWG-300 Kcmil (Cu/Al)
400	1/0 AWG-300 Kcmil (Cu/Al) or (2) 1/0 AWG-250 Kcmil (Cu/Al)	(1) 1/0 AWG – 750 Kcmil (Cu/Al) or (2) 1/0 AWG – 250 Kcmil (Cu/Al)
600	(2) 1/0 AWG-750 Kcmil (Cu/Al) or (4) 1/0 – 250 Kcmil (Cu/Al)	(2) 1/0 AWG – 750 Kcmil (Cu/Al) or (4) 1/0 AWG – 250 Kcmil (Cu/Al)

Type VBII Disconnect Switches

Dimensions

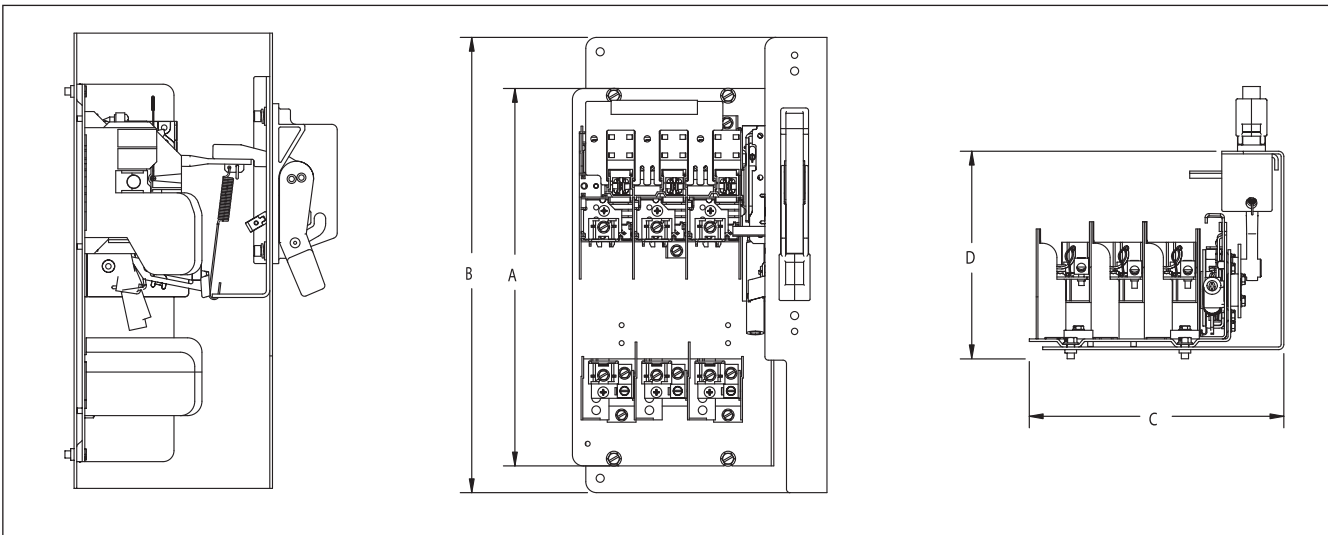
Approximate Dimensions

Mounting bracket shown with handle installed is supplied with Flange Mounted Switches only. All panel mounted

switches have a "L" shaped mounting pan with a line base, load base (if fusible) and mechanism installed.

Catalog Number	Dimensions A	B	C ①	D (min)	D (max)
Fusible, Panel Mounted					
VBFS321	11.88	N/A	7.27	6.81	19.00
VBFS322	13.12	N/A	8.65	6.81	19.00
VBFS361	11.88	N/A	7.27	6.81	19.00
VBFS362	13.12	N/A	8.65	6.81	19.00
VBFS363	13.12	N/A	8.65	6.81	19.00
VBFS364	17.00	N/A	14.49	7.05	19.00
VBFS365	26.10	N/A	17.50	8.63	19.00
VBFS366	26.10	N/A	17.50	8.63	19.00
Non-Fusible, Panel Mounted					
VBNFS361	9.79	N/A	7.27	6.81	19.00
VBNFS362	9.79	N/A	8.65	6.81	19.00
VBNFS363	9.79	N/A	8.65	6.81	19.00
VBNFS364	10.77	N/A	12.49	7.05	19.00
VBNFS365	13.00	N/A	17.50	8.63	19.00
VBNFS366	13.00	N/A	17.50	8.63	19.00
Fusible, Flange Mounted					
VBFS321F	11.88	14.07	7.47	7.27	N/A
VBFS322F	13.12	15.83	8.85	7.27	N/A
VBFS361F	11.88	14.07	7.47	7.27	N/A
VBFS362F	13.12	15.83	8.85	7.27	N/A
VBFS363F	13.12	15.83	8.85	7.27	N/A
VBFS364F	17.00	18.20	12.68	7.57	N/A
Non-Fusible, Flange Mounted					
VBNFS361F	9.79	11.78	7.47	7.27	N/A
VBNFS362F	9.79	11.78	8.85	7.27	N/A
VBNFS363F	9.79	11.78	8.85	7.27	N/A
VBNFS364F	10.77	12.00	12.68	7.57	N/A

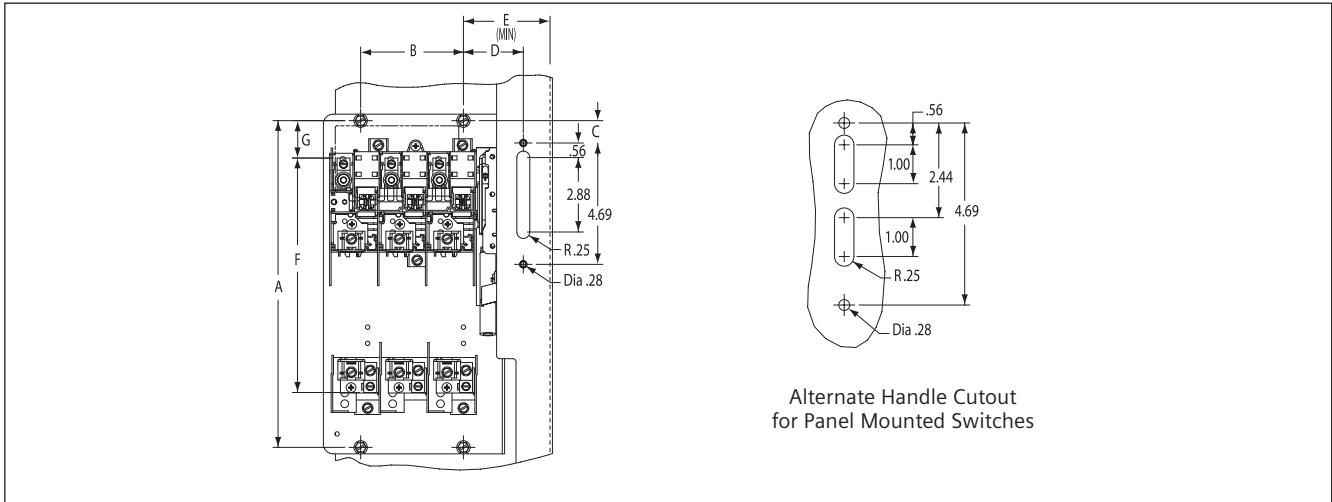
① Dimension C for panel mounted switches indicates the minimum width from the left hand edge of the switch mounting pan to the right hand inside surface of the enclosure.



Type VBII Disconnect Switches

Dimensions — Mounting, Handle and Handle Cutouts

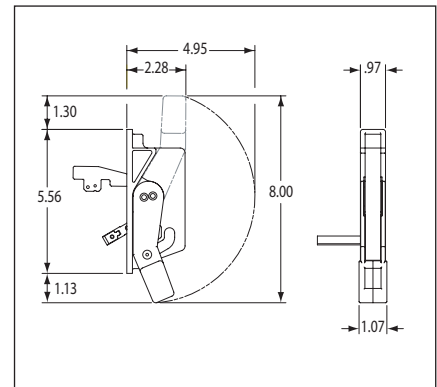
Flange Cutout for VBH1 and VBN14X Handles and Relative Location to Panel Mounted 30-200A Switches



For 30 – 200A Panel Mounted Switches ①

Ampere Rating	Dimensions (inches)						
	A	B	C ①	D	E	F	G
Fusible – 240V							
30	11.38	2.50	.86	2.31	3.35	5.79	1.20
60	12.62	3.97	.86	2.31	3.35	6.56	1.44
Fusible – 600V							
30	11.38	2.50	.86	2.31	3.35	8.54	1.20
60	12.62	3.97	.86	2.31	3.35	9.06	1.44
100	12.62	3.97	.86	2.31	3.35	9.61	1.30
200	16.50	6.50	1.75	2.26	3.29	14.25	1.15
Non-Fusible							
30	9.29	2.50	.86	2.31	3.35	N/A	1.20
60	9.29	3.97	.86	2.31	3.35	N/A	1.44
100	9.29	3.97	.86	2.31	3.35	N/A	1.30
200	10.27	6.50	1.75	2.26	3.29	N/A	1.15

VBH1 and VBH14X Handle Dimensions ①



① Handle and handle cutout dimensions also apply to VBHM1 Max-Flex Handle and Adapter Kits.

Dimensions – Mounting, Handle and Handle Cutout for 400A Switches with VBH2 Handle

Catalog Number	Dimensions (inches)		
	A	B	C
VBSF365	25.50	26.12	21.60
VBNFS365	12.38	13.10	10.09

