900A Load Break and Fault Interrupting Switches

G&W Electric

Engineered to order. Built to last.

900A Load Break and Fault Interrupting Switches switches are designed to IEEE C37.72, C37.74, and C37.60 for load break and fault interrupting capability. Padmount enclosures are designed and tested to IEEE C57.12.28 and C57.12.29.

Three Position, Model GNI

Switchgear incorporates linear puffer style internal ground switching for both the load break and fault interrupter switch ways. Model NI vacuum interrupter three phase mechanisms are used for fault interrupting.

Load Break (GPLP and LP) and Fault Interrupting (NI) Ratings

Maximum design voltage (kV)	15.5	27	38
Voltage Class, (kV)	15	25	35
BIL Impulse (kV)	110	125	150
1 Min Withstand AC (kV)	35	60	70
1 Min Withstand Production test rating AC (kV)	34	40	50
15 Min Withstand DC (kV)	53	78	103
Continuous and load break current (A)*	900	900	900
Momentary Current (kA) asym	40	40	40
Fault-Close 3-times (kA) asym	40	40	40
1 Sec Current (kA) sym	25	25	25
Mechanical Operations	2000	2000	2000
Symmetrical interrupting ratings (kA)**	25	25	25

**630A continuous available*
***12.5kA and 20kA available*

Linear Puffer Style Load Break Mechanisms

G&W Electric's patented Ground Position Linear Puffer (GPLP) and Linear Puffer (LP) style switches are ideal for heavy duty manual load break switching, automatic transfer or automated sectionalizing applications rated through 38kV, 900A continuous and 40kA asymmetrical short circuit. Switches are tested 2000 mechanical operations.

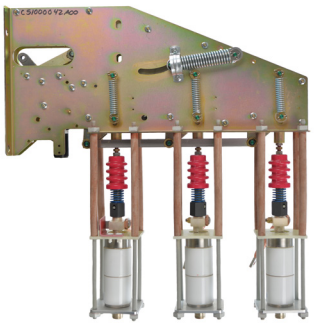
G&W Electric's GPLP style contact system provides extremely efficient, high speed arc extinction for maximum service life. The family is available with two position with the LP, and three position with the GPLP to allow switching to the ground position without the need to remove cables or elbows.

Three position GPLP

Two position LP

NI Vacuum Interrupter Mechanism

The model NI vacuum interrupters consist of three vacuum bottles mechanically linked to a single spring-assisted operating mechanism. Once initiated, the interrupting time of the vacuum bottles is approximately 3 cycles (50 millisec). A position indicator (open-green, closed-red) driven by the operating mechanism is visible through a viewing window for positive contact position. The mechanical linkage assembly provides a “trip-free” operation permitting the vacuum interrupter to interrupt independent of the operating handle if closing into a faulted circuit.



Model NI three phase mechanism

Percent of Maximum Interrupting Rating	Approximate Interrupting Current, Amps	Number of Fault Interruptions
15-20%	5,000	44
45-55%	12,500	56
90-100%	25,000	16

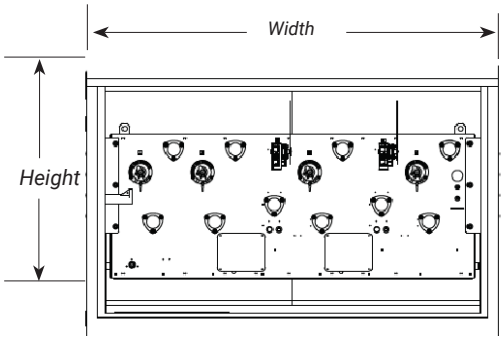
Total Number of Fault Interruptions: 116

Three Position, Front / Rear Access, Model GNI, Padmount

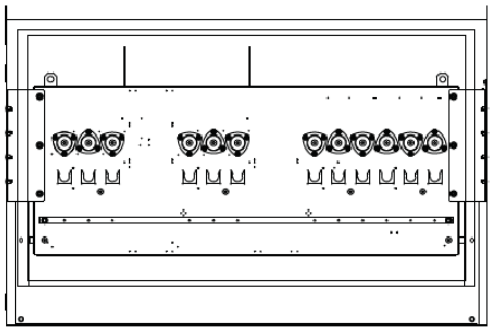
Front/back access design with all operating mechanisms in the front and all cable entrances in the back compartment. Contact viewing windows are located on the front of the switch tank.

Cable entrances are located on the back of the switch.

Three Position, Front / Rear Access, Model GNI, Padmount

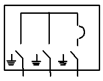
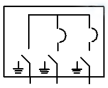
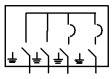
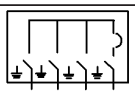
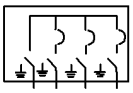
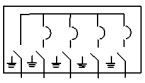
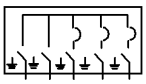
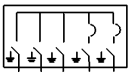
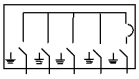
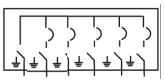
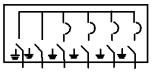
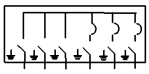
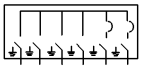
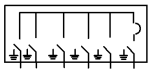


Front view showing load break and vacuum interrupter operators.

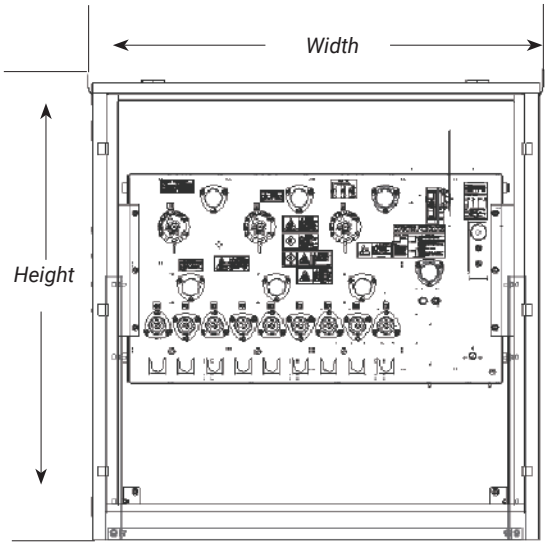


Rear view showing all cable entrances

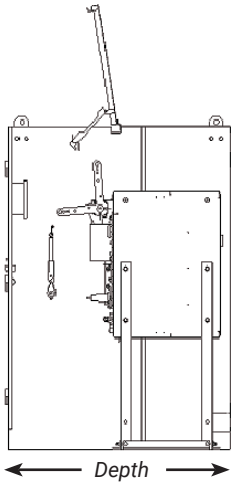
Height = 65" (1650mm)
Depth = 81" (2057mm)
with 27" cable compartment depth
Bushing Height = 37.5" (952mm)

# of ways	One-line diagram	Voltage Class (kV)	Catalog Number	Width in. (mm)
5		15	GNI21-379-25-5L	59.5 (1151)
		25	GNI21-389-25-5L	
		35	GNI21-399-25-5L	
6		15	GNI32-379-25-6L	74.5 (1892)
		25	GNI32-389-25-6L	
		35	GNI32-399-25-6L	
7		15	GNI31-379-25-7L	83 (2108)
		25	GNI31-389-25-7L	
		35	GNI31-399-25-7L	
9		15	GNI42-379-25-9L	98 (2489)
		25	GNI42-389-25-9L	
		35	GNI42-399-25-9L	
11		15	GNI43-379-25-11L	89.5 (2273)
		25	GNI43-389-25-11L	
		35	GNI43-399-25-11L	
12		15	GNI41-379-25-12L	104.5 (2654)
		25	GNI41-389-25-12L	
		35	GNI41-399-25-12L	
51		15	GNI51-379-25-51L	130 (3302)
		25	GNI51-389-25-51L	
		35	GNI51-399-25-51L	
52		15	GNI52-379-25-52L	121.5 (3086)
		25	GNI52-389-25-52L	
		35	GNI52-399-25-52L	
53		15	GNI53-379-25-53L	113 (2870)
		25	GNI53-389-25-53L	
		35	GNI53-399-25-53L	
54		15	GNI54-379-25-54L	104.5 (2654)
		25	GNI54-389-25-54L	
		35	GNI54-399-25-54L	
61		15	GNI61-379-25-61L	153.5 (3899)
		25	GNI61-389-25-61L	
		35	GNI61-399-25-61L	
62		15	GNI62-379-25-62L	145 (3683)
		25	GNI62-389-25-62L	
		35	GNI62-399-25-62L	
63		15	GNI63-379-25-63L	136.5 (3467)
		25	GNI63-389-25-63L	
		35	GNI63-399-25-63L	
64		15	GNI64-379-25-64L	128 (3251)
		25	GNI64-389-25-64L	
		35	GNI64-399-25-64L	
65		15	GNI65-379-25-65L	119.5 (3035)
		25	GNI65-389-25-65L	
		35	GNI65-399-25-65L	

Three Position, Front Access, Model GNI

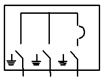
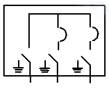
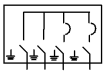
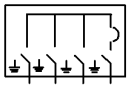
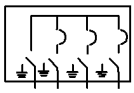
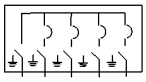
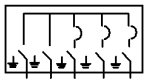
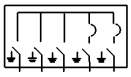
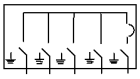
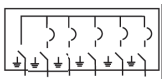
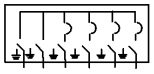
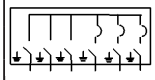
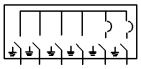
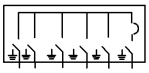


Front view showing load break and vacuum interrupter operators.



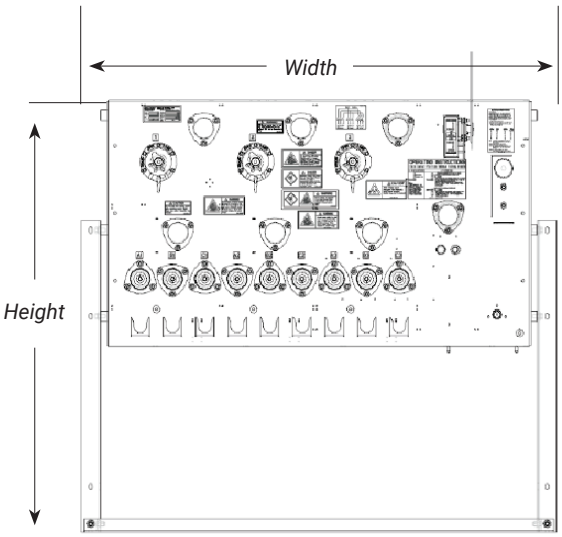
Right side view

Height = 64" (1625mm)
Depth = 60" (1524mm)
with 27" cable compartment depth
Bushing Height = 24" (610mm)

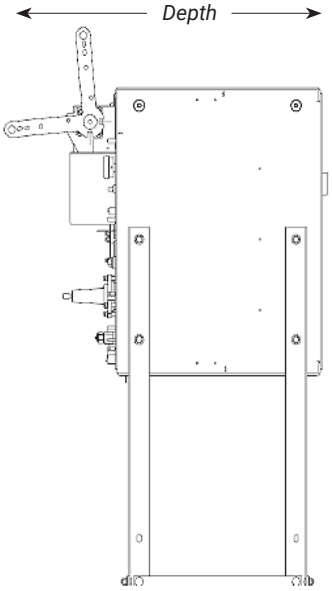
# of ways	One-line diagram	Voltage Class (kV)	Catalog Number	Width in. (mm)
5		15	GNI21-379-25-5F	59.5 (1151)
		25	GNI21-389-25-5F	
		35	GNI21-399-25-5F	
6		15	GNI32-379-25-6F	74.5 (1892)
		25	GNI32-389-25-6F	
		35	GNI32-399-25-6F	
7		15	GNI31-379-25-7F	83 (2108)
		25	GNI31-389-25-7F	
		35	GNI31-399-25-7F	
9		15	GNI42-379-25-9F	98 (2489)
		25	GNI42-389-25-9F	
		35	GNI42-399-25-9F	
11		15	GNI43-379-25-11F	89.5 (2273)
		25	GNI43-389-25-11F	
		35	GNI43-399-25-11F	
12		15	GNI41-379-25-12F	104.5 (2654)
		25	GNI41-389-25-12F	
		35	GNI41-399-25-12F	
51		15	GNI51-379-25-51F	130 (3302)
		25	GNI51-389-25-51F	
		35	GNI51-399-25-51F	
52		15	GNI52-379-25-52F	121.5 (3086)
		25	GNI52-389-25-52F	
		35	GNI52-399-25-52F	
53		15	GNI53-379-25-53F	113 (2870)
		25	GNI53-389-25-53F	
		35	GNI53-399-25-53F	
54		15	GNI54-379-25-54F	104.5 (2654)
		25	GNI54-389-25-54F	
		35	GNI54-399-25-54F	
61		15	GNI61-379-25-61F	153.5 (3899)
		25	GNI61-389-25-61F	
		35	GNI61-399-25-61F	
62		15	GNI62-379-25-62F	145 (3683)
		25	GNI62-389-25-62F	
		35	GNI62-399-25-62F	
63		15	GNI63-379-25-63F	136.5 (3467)
		25	GNI63-389-25-63F	
		35	GNI63-399-25-63F	
64		15	GNI64-379-25-64F	128 (3251)
		25	GNI64-389-25-64F	
		35	GNI64-399-25-64F	
65		15	GNI65-379-25-65F	119.5 (3035)
		25	GNI65-389-25-65F	
		35	GNI65-399-25-65F	

Three Position, Front Access, Model GNI, Vault

Front access design with all operating mechanisms, cable entrances and viewing windows on a single side.

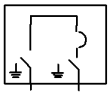
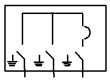
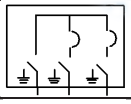
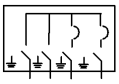
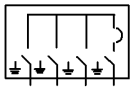
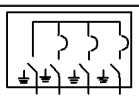
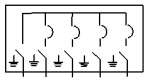
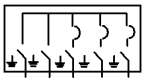
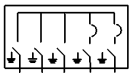
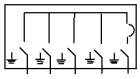
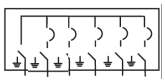
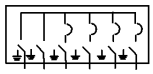
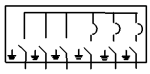
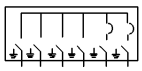
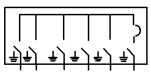


Front view showing load break and vacuum interrupter operators.



Right side view

Height = 58" (1473mm)
Depth = 36" (915mm)
Bushing Height = 24" (610mm)

# of ways	One-line diagram	Voltage Class (kV)	Catalog Number	Width in. (mm)
5		15	VGNI21-379-25-5F	59.5 (1511)
		25	VGNI21-389-25-5F	
		35	VGNI21-399-25-5F	
6		15	VGNI32-379-25-6F	74.5 (1892)
		25	VGNI32-389-25-6F	
		35	VGNI32-399-25-6F	
7		15	VGNI31-379-25-7F	83 (2108)
		25	VGNI31-389-25-7F	
		35	VGNI31-399-25-7F	
9		15	VGNI42-379-25-9F	98 (2489)
		25	VGNI42-389-25-9F	
		35	VGNI42-399-25-9F	
11		15	VGNI43-379-25-11F	89.5 (2273)
		25	VGNI43-389-25-11F	
		35	VGNI43-399-25-11F	
12		15	VGNI41-379-25-12F	104.5 (2654)
		25	VGNI41-389-25-12F	
		35	VGNI41-399-25-12F	
51		15	VGNI51-379-25-51F	130 (3302)
		25	VGNI51-389-25-51F	
		35	VGNI51-399-25-51F	
52		15	VGNI52-379-25-52F	121.5 (3086)
		25	VGNI52-389-25-52F	
		35	VGNI52-399-25-52F	
53		15	VGNI53-379-25-53F	113 (2870)
		25	VGNI53-389-25-53F	
		35	VGNI53-399-25-53F	
54		15	VGNI54-379-25-54F	104.5 (2654)
		25	VGNI54-389-25-54F	
		35	VGNI54-399-25-54F	
61		15	VGNI61-379-25-61F	153.5 (3899)
		25	VGNI61-389-25-61F	
		35	VGNI61-399-25-61F	
62		15	VGNI62-379-25-62F	145 (3683)
		25	VGNI62-389-25-62F	
		35	VGNI62-399-25-62F	
63		15	VGNI63-379-25-63F	136.5 (3467)
		25	VGNI63-389-25-63F	
		35	VGNI63-399-25-63F	
64		15	VGNI64-379-25-64F	128 (3251)
		25	VGNI64-389-25-64F	
		35	VGNI64-399-25-64F	
65		15	VGNI65-379-25-65F	119.5 (3035)
		25	VGNI65-389-25-65F	
		35	VGNI65-399-25-65F	

Three Position, Model PNI

Model PNI switchgear incorporates linear puffer(LP) style load break switches. Model NI vacuum interrupter three phase mechanisms are used on both Model switches. PNI switches are available with front access, front to operators and rear access to bushings, front access to operators and bottom access to bushings, front access to operators and top access to bushings, and front and back access to bushings and operators.

Load Break (LP) and Fault Interrupter (NI) Ratings

Maximum design voltage (kV)	15.5	27	38
Voltage Class, (kV)	15	25	35
BIL Impulse (kV)	110	125	150
1 Min Withstand AC (kV)	35	60	70
1 Min Withstand Production test rating AC (kV)	34	40	50
15 Min Withstand DC (kV)	53	78	103
Continuous and load break current (A)*	900	900	900
Momentary Current (kA) asym	40	40	40
Fault-Close 3-times (kA) asym	40	40	40
1 Sec Current (kA) sym	25	25	25
Mechanical Operations	2000	2000	2000
Symmetrical interrupting ratings (kA)**	25	25	25

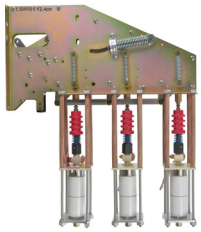
**630A continuous available **12.5kA and 20kA available*

Percent of Maximum Interrupting Rating	Approximate Interrupting Current, Amps	Number of Fault Interruptions
15-20%	5,000	44
45-55%	12,500	56
90-100%	25,000	16
Total Number of Fault Interruptions: 116		

Linear Puffer Style

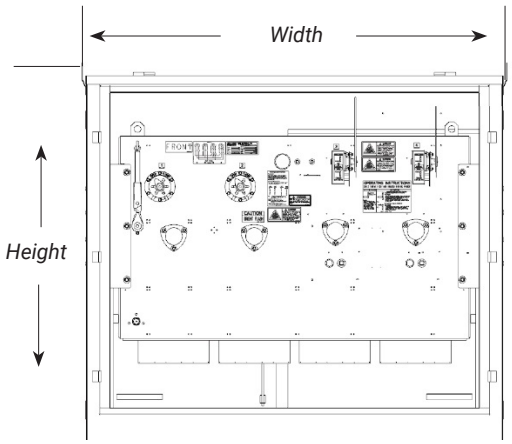
G&W's patented Linear Puffer (LP) style switches are ideal for heavy duty manual load break switching, automatic transfer or automated sectionalizing applications are rated through 38kV, 900A continuous and 40kA asymmetrical short circuit. Switches are tested 2000 mechanical operations. G&W's linear puffer style contact system provides extremely efficient, high speed arc extinction for maximum service life.

NI Vacuum Interrupter Mechanism

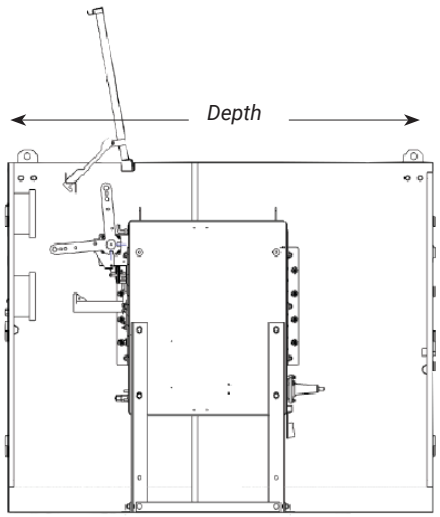


The model NI vacuum interrupters consist of three vacuum bottles mechanically linked to a single spring-assisted operating mechanism. Once initiated, the interrupting time of the vacuum bottles is approximately 3 cycles (50 millisec). A position indicator (open-green, closed-red) driven by the operating mechanism and is visible through a viewing window for positive contact position. The mechanical linkage assembly provides "trip-free" operation permitting the vacuum interrupter to interrupt independent of the operating handle if closing into a faulted circuit.

Three Position, Front/ Rear Access, Model PNI-L Style, Puffer Vacuum Interrupters

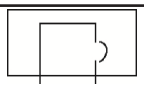
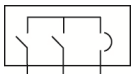
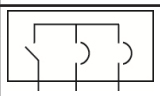
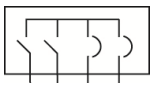
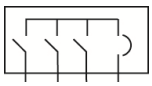
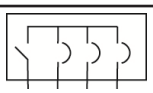
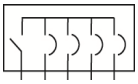
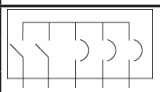
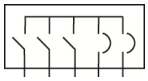
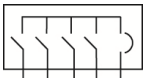
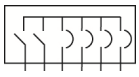
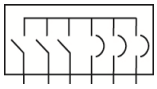
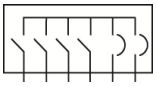
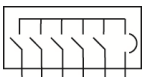
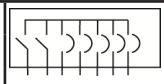


Front view

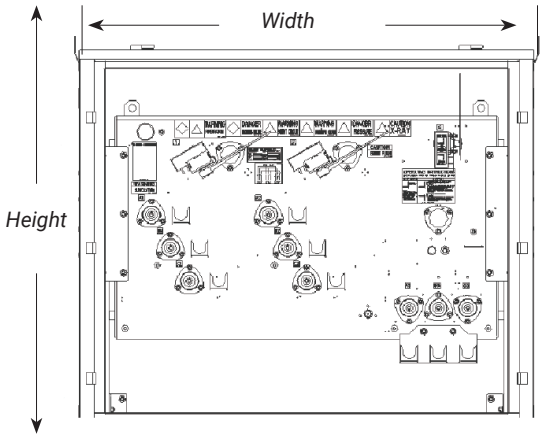


Right side view

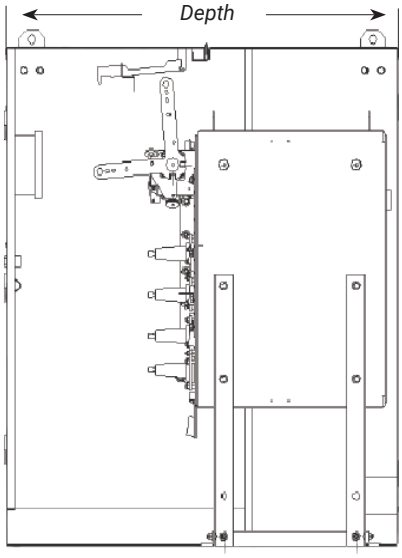
Height = 68" (1727mm)
Depth = 80" (2032mm)
with 24" cable compartment depth
Bushing Height = 24" (610mm)

# of ways	One-line diagram	Voltage Class (kV)	Catalog Number	Width In. (mm)	Wt. w/ SF6 lbs (kg)
4		15	PNI20-379-25-4L	47.5 (1206)	1650 (750)
		25	PNI20-389-25-4L		
		35	PNI20-399-25-4L		
6		15	PNI32-379-25-6L	62.5 (1588)	2050 (932)
		25	PNI32-389-25-6L		
		35	PNI32-399-25-6L		
7		15	PNI31-379-25-7L		
		25	PNI31-389-25-7L		
		35	PNI31-399-25-7L		
9		15	PNI42-379-25-9L	77.5 (1969)	2500 (1136)
		25	PNI42-389-25-9L		
		35	PNI42-399-25-9L		
11		15	PNI43-379-25-11L		
		25	PNI43-389-25-11L		
		35	PNI43-399-25-11L		
12		15	PNI41-379-25-12L		
		25	PNI41-389-25-12L		
		35	PNI41-399-25-12L		
51		15	PNI51-379-25-51L	92.5 (2350)	2900 (1318)
		25	PNI51-389-25-51L		
		35	PNI51-399-25-51L		
52		15	PNI52-379-25-52L		
		25	PNI52-385-25-52L		
		35	PNI52-399-25-52L		
53		15	PNI53-379-25-53L		
		25	PNI53-389-25-53L		
		35	PNI53-399-25-53L		
54		15	PNI54-379-25-54L		
		25	PNI54-389-25-54L		
		35	PNI54-399-25-54L		
62		15	PNI62-379-25-62L	107.5 (2731)	3350 (1522)
		25	PNI62-389-25-62L		
		35	PNI62-399-25-62L		
63		15	PNI63-379-25-63L		
		25	PNI63-389-25-63L		
		35	PNI63-399-25-63L		
64		15	PNI64-379-25-64L		
		25	PNI64-389-25-64L		
		35	PNI64-399-25-64L		
65		15	PNI65-379-25-65L		
		25	PNI65-389-25-65L		
		35	PNI65-389-25-65L		
72		15	PNI72-379-25-72L	122.5 (3111)	4000 (1818)
		25	PNI72-389-25-72L		
		35	PNI72-399-25-72L		

Two Position, Front Access, PNI-F Style, Puffer Vacuum Interrupters

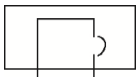
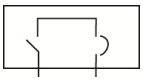
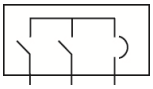
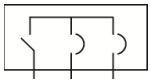
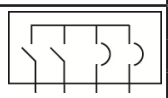


Front view



Right side view

Height = 68" (1727mm)
Depth = 56" (1422mm)
with 24" cable compartment depth
Bushing Height = 24" (610mm)

# of ways	One-line diagram	Voltage Class (kV)	Catalog Number	Width In. (mm)	Wt. w/ SF6 lbs (kg)
4		15	PNI20-379-25-4F	47.5 (1207)	1500 (692)
		25	PNI20-389-25-4F		
		35	PNI20-399-25-4F		
5		15	PNI21-379-25-5F		1550 (705)
		25	PNI21-389-25-5F		
		35	PNI21-399-25-5F		
6		15	PNI32-379-25-6F	62.5 (1588)	1920 (873)
		25	PNI32-389-25-6F		
		35	PNI32-399-25-6F		
7		15	PNI31-379-25-7F		2050 (932)
		25	PNI31-389-25-7F		
		35	PNI31-399-25-7F		
9		15	PNI42-379-25-9F	77.5 (1969)	2300 (1045)
		25	PNI42-389-25-9F		
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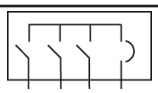
11		15	PNI43-379-25-11F		2400 (1091)
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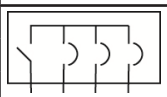
		35	PNI43-399-25-11F		
12		15	PNI41-379-25-12F		
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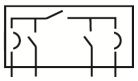
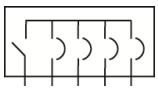
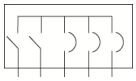
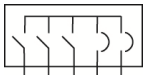
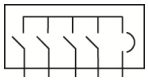
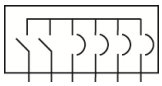
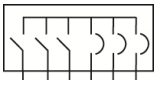
		35	PNI41-399-25-12F		
43		15	PNI43-379-25-43FBT	92.5 (2350)	2750 (1250)
		25	PNI43-389-25-43FBT		
		35	PNI43-399-25-43FBT		
51		15	PNI51-379-25-51F		2900 (1318)
		25	PNI51-389-25-51F		
		35	PNI51-399-25-51F		
52		15	PNI52-379-25-52F		2800 (1273)
		25	PNI52-385-25-52F		
		35	PNI52-399-25-52F		
53		15	PNI53-379-25-53F		2750 (1250)
		25	PNI53-389-25-53F		
		35	PNI53-399-25-53F		
54		15	PNI53-379-25-53F		2650 (1205)
		25	PNI54-389-25-54F		
		35	PNI54-399-25-54F		
62		15	PNI54-379-25-54F	107.5 (2731)	3300 (1500)
		25	PNI62-389-25-62F		
		35	PNI62-399-25-62F		
63		15	PNI63-379-25-63F		3200 (1455)
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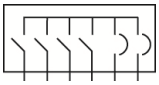
		35	PNI63-399-25-63F		
64		15	PNI64-379-25-64F		3100 (1409)
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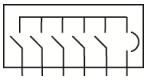
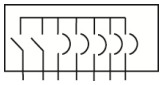
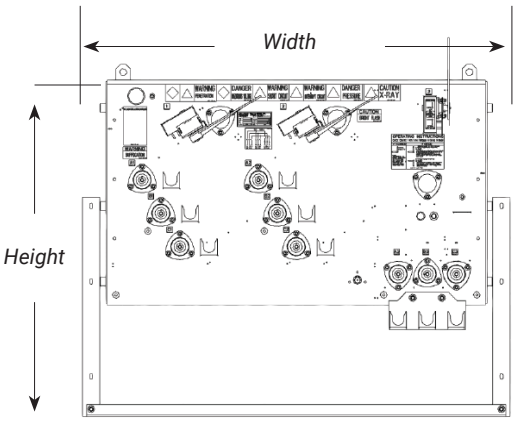
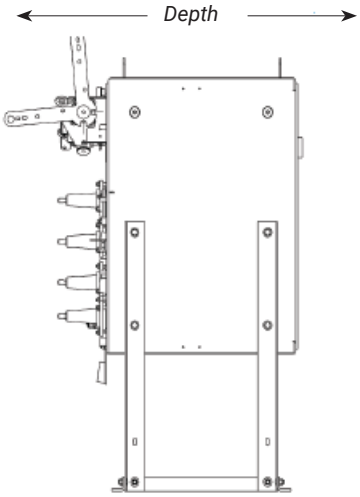
		35	PNI64-399-25-64F		
65		15	PNI65-379-25-65F		3000 (1364)
		25	PNI65-389-25-65F		
		35	PNI65-389-25-65F		
72		15	PNI72-379-25-72F	122.5 (3112)	3850 (1750)
		25	PNI72-389-25-72F		
		35	PNI72-399-25-72F		

Two Position, Front Access, PNI-F Style, Puffer Vacuum Interrupters, Vault

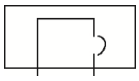
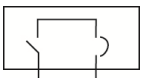
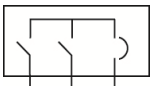
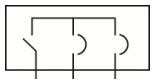
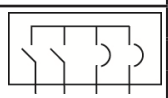
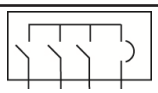


Front view



Right side view

Replace with:
Height = 60" (14524mm)
Depth = 36" (915mm)
Bushing Height = 24" (610mm)

# of ways	One-line diagram	Voltage Class (kV)	Catalog Number Width	Width In. (mm)	Wt. w/ SF6 lbs (kg)
4		15	VPNI20-379-25-4F	47.5 (1207)	1500 (692)
		25	VPNI20-389-25-4F		
		35	VPNI20-399-25-4F		
5		15	VPNI21-379-25-5F		1550 (705)
		25	VPNI21-389-25-5F		
		35	VPNI21-399-25-5F		
6		15	VPNI32-379-25-6F	62.5 (1588)	1920 (873)
		25	VPNI32-389-25-6F		
		35	VPNI32-399-25-6F		
7		15	VPNI31-379-25-7F		2050 (932)
		25	VPNI31-389-25-7F		
		35	VPNI31-399-25-7F		
9		15	VPNI42-379-25-9F	77.5 (1969)	2300 (1045)
		25	VPNI42-389-25-9F		
		35	VPNI42-399-25-9F		
11		15	VPNI43-379-25-11F		2400 (1091)
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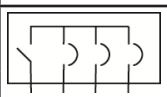
		35	VPNI43-399-25-11F		
12		15	VPNI41-379-25-12F		
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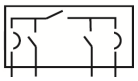
43		15	VPNI43-379-25-43FBT	92.5 (2350)	2750 (1250)
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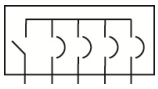
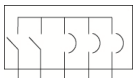
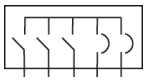
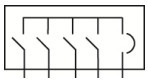
51		15	VPNI51-379-25-51F		2900 (1318)
		25	VPNI51-389-25-51F		
		35	VPNI51-399-25-51F		
52		15	VPNI52-379-25-52F		2800 (1273)
		25	VPNI52-385-25-52F		
		35	VPNI52-399-25-52F		
53		15	VPNI53-379-25-53F		2750 (1250)
		25	VPNI53-389-25-53F		
		35	VPNI53-399-25-53F		
54		15	VPNI53-379-25-53F		2650 (1205)
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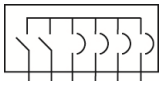
62		15	VPNI54-379-25-54F	107.5 (2731)	3300 (1500)
		25	VPNI62-389-25-62F		
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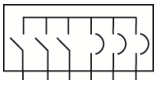
63		15	VPNI63-379-25-63F		3200 (1455)
		25	VPNI63-389-25-63F		
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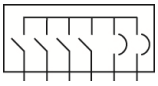
64		15	VPNI64-379-25-64F		3100 (1409)
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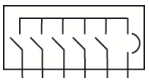
65		15	VPNI65-379-25-65F		3000 (1364)
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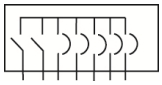
		35	VPNI65-389-25-65F		
72		15	VPNI72-379-25-72F	122.5 (3112)	3850 (1750)
		25	VPNI72-389-25-72F		
		35	VPNI72-399-25-72F		

NOTES

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