DNH18
Fuse Switch Disconnector

The DNH18 Vertical fuse switch is a new vertical fuse switch disconnector by GRL for three years.

In the early stage of research and development, market research was carried out, user feedback was integrated,and the product structure was optimized according to the new PI planning of GRL. Each design can solve the problems faced by user in practical application andprovide the market with a new choice.

Model & Meaning

DN	H	18	-	630	/	3	0	1	L	D
①	②	③		④		⑤	⑥	⑦	⑧	⑨

① Enterprise code
② DISCONNECTOR SWITCH
③ Design code
④ Conerntional thermal cuurent
⑤ Poles
⑥ 0” means a fixed type “1” means hanging
⑦ “0” means no auxiliary contact (not specified)
“1” means with auxiliary contacts
⑧“L” means three- phase simultaneous operation
“S” means three- phase separate operation
⑨ “D” means with isolating knife No
“D” means with fuse

DNH18
Fuse Switch Disconnector

DNH18 Vertical Fuse Switch Disconnector Technical Parameters

					DNH18-160			DNH18-250			DNH18-400			DNH18-630		
Electrical parameter	With fuse link	Rated operating voltage	Ue	V	AC400	AC500	AC690	AC400	AC500	AC690	AC400	AC500	AC690	AC400	AC500	AC690
		Rated operating current	Ie	A	160	125	100	250	250	200	400	400	315	630	630	500
		Conventional thermal current	Ith	A	160	125	100	250	250	200	400	400	315	630	630	500
		Utilization Category			AC-23B	AC-23B	AC-22B	AC-23B	AC-22B	AC-21B	AC-23B	AC-22B	AC-21B	AC-23B	AC-22B	AC-21B
		Rated limited short-circuit current	Iq	kA		50		100	100	50	100	100	50	100	100	50
		Rated insulation voltage	Ui	V		1000			1000			1000			1000	
		Rated impulse withstand voltage	Uimp	kV		8			12			12			12	
		Rated frequency		Hz		50\60			50\60			50\60			50\60	
		Electrical endurance times		second		200			200			200			200	
	With copper link	Rated operating voltage	Ue	V		\		\	AC500	\	\	AC500	\	\	AC500	\
		Rated operating current	Ie	A		\		\	250	\	\	400	\	\	630	\
		Conventional thermal current	Ith	A		\		\	250	\	\	400	\	\	630	\
		Utilization Category				\		\	AC-23B	\	\	AC-23B	\	\	AC-23B	\
		Rated limited short-circuit current	Icw	kA		\		\	12	\	\	12	\	\	12	\
		Rated insulation voltage	Ui	V		\			1000			1000			1000	
		Rated impulse withstand voltage	Uimp	kV		\			12			12			12	
		Rated frequency		Hz		\			50\60			50\60			50\60	
		Electrical endurance Times		second		\			200			200			200	
Fuse		Fuse size (RT16NTNH) GB/T13539.2 IEC 60269-2				00			1			2			3	
		Operating current	In	A	160	125	100	250	250	200	400	400	315	630	630	500
		Power loss	P	W	12	12	12	18	23	32	28	34	45	40	48	60
Mechanism		Mechanical endurance times		second		1400			1400		800	800	1400		800	
		Busbar spacing		mm		185			185			185			185	
Protection		Frontal	On			IP20			IP20			IP20			IP20	
			Off			IP30			IP30			IP30			IP30	
Other		Electronic Fuse Monitor (EFM)				Can be added			Can be added			Can be added			Can be added	
		Signal feedback for opening and closing the switch (micro switch)				Can be added			Can be added			Can be added			Can be added	
Working conditions		Ambient temperature		℃					-5～+55							
		Working mode							Continuous operation							
		Operation							Handle							
		Installation form							Vertical							
		Sea level		Meter					≤2000							
		Pollution degree							3							
		Overvoltage category				III			IV							

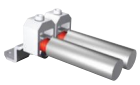
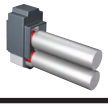
DNH18
Fuse Switch Disconnector

DNH18 Vertical Switch Disconnector Technical Parameters

					DNH18-1000	DNH18-630x2	DNH18-1000x2
Electrical parameter	With fuse link	Rated operating voltage	Ue	V	\	\	\
		Rated operating current	Ie	A	\	\	\
		Conventional thermal current	Ith	A	\	\	\
		Utilization Category			\	\	\
		Rated limited short-circuit current	Iq	kA	\	\	\
		Rated insulation voltage	Ui	V	\	\	\
		Rated impulse withstand voltage	Uimp	kV	\	\	\
		Rated frequency		Hz	\	\	\
		Electrical endurance times		second	\	\	\
	With copper link	Rated operating voltage	Ue	V	AC500	AC500	AC500
		Rated operating current	Ie	A	\ 1000 \	\ 1250 \	\ 2000 \
		Conventional thermal current	Ith	A	\ 1000 \	\ 1250 \	\ 2000 \
		Utilization Category			\ AC-21B \	\ AC-21B \	\ AC-21B \
		Rated limited short-circuit current	Icw	kA	\ 15, 25(special structure)	\ 15 \	\ 25 \
		Rated insulation voltage	Ui	V	1000	1000	1000
		Rated impulse withstand voltage	Uimp	kV	12	12	12
		Rated frequency		Hz	50\60	50\60	50\60
		Electrical endurance Times		second	100	100	100
Fuse		Fuse size (RT16NTNH) GB/T13539.2 IEC 60269-2			\	\	\
		Operating current	In	A	\	\	\
		Power loss	P	W	\	\	\
Mechanism		Mechanical endurance times		second	500	500	500
		Busbar spacing		mm	185	185	185
Protection		Frontal	On		IP20	IP20	IP20
			Off		IP30	IP30	IP30
Other		Electronic Fuse Monitor (EFM)			Can be added	Can be added	Can be added
		Signal feedback for opening and closing the switch (micro switch)			Can be added	Can be added	Can be added
Working conditions		Ambient temperature		℃	-5～+55		
		Working mode			Continuous operation		
		Operation			Handle		
		Installation form			Vertical		
		Sea level		Meter	≤2000		
		Pollution degree			3		
		Overvoltage category			IV		

DNH18
Fuse Switch Disconnector

DNH18 Vertical Fuse Switch Disconnector Accessories Table

	Type	Item No.	Appearance	Name	Part No.	Conductor cross section min.–max. (mm^2)	Torque (N · m)	Quantity (per unit)	Specifications for the matched vertical fuse switch disconnector	Standard	Optional
Accessories	Product accessories	1.1		Position block	——	——	——	4	DNH18–250~630	●	
		1.2		Insulation board	——	——	——	2		●	
		1.3		Multi–function meter	DN57020	——	——	1			●
		1.4		Current transformer (class 0.5)	Choose the switch model no. base on customer’s ampere in demand.	——	——	3			●
		1.5		Electronic Fuse Monitor (EFM)	DN57001	——	——	1	DNH18–160~630		●
	Mounting terminal	2.1		Hanging terminal	DN54251	——	8	3	DNH18–160		●
		2.2		Hanging terminal	DN54253	——	30	3	DNH18–250~630		●
	Wiring terminal	3.1	Matching cable lug or busbar	M8 bolt	-----	16–70	12	3	DNH18–160		●
		3.2	Matching cable lug or busbar	M10 bolt	-----	35–240	30	3	DNH18–250		●
		3.3	Matching cable lug or busbar	M10 bolt	-----	35–240	30	3	DNH18–400		●
		3.4	Matching cable lug or busbar	M12 bolt	-----	70–240	35	3	DNH18–630		●
		3.5		Wiring terminal	DN54224	16–70 s(r) 16–70 s(s) 16–70 f+AE	3	3	DNH18–160		●
		3.6		Wiring terminal	DN54267	35–70 s(r) 16–150 s(s) 16–185sol(s)	25	3	DNH18–250		●
		3.7		Wiring terminal(V–shaped)	DN54275	50~300s(r) 50~240s(s) 50~300sol(s)	30	3	DNH18–250~630		●
		3.8		Horizontal double core wiring terminal	DN54276	2*185~240	30	1	DNH18–630		●
		3.9		Vertical double core wiring terminal		2*185~240	30	2	DNH18–630		●

DNH18
Fuse Switch Disconnector

DNH18 Vertical Fuse Switch Disconnector Selection Table

No.	Part No.	Pole	Current	System	Size	Adaptation	Remarks
1	DNH18-160/3L	3	160A	185	668 × 50	Fixed installation (drill hole), three-phase synchronous operation and with fuse	
2	DNH18-160/311L	3	160A	185		Hanging installation, with auxiliary contacts, three-phase synchronous operation and with fuse	
3	DNH18-250/3L	3	250A	185	666 × 100	Fixed installation (drill hole), three-phase synchronous operation and with fuse	
4	DNH18-250/3S	3	250A	185		Fixed installation (drill hole), three-phase separate operation and with fuse	
5	DNH18-250/3LD	3	250A	185		Fixed installation (drill hole), three-phase synchronous operation and with fuse isolation knife	
6	DNH18-250/311L	3	250A	185		Fixed installation (drill hole), three-phase synchronous operation and with fuse	
7	DNH18-400/3L	3	400A	185		Fixed installation (drill hole), three-phase synchronous operation and with fuse	
8	DNH18-400/3S	3	400A	185		Fixed installation (drill hole), three-phase separate operation and with fuse	
9	DNH18-400/3LD	3	400A	185		Fixed installation (drill hole), three-phase synchronous operation and with fuse isolation knife	
10	DNH18-400/311L	3	400A	185		Fixed installation (drill hole), three-phase synchronous operation and with fuse	
11	DNH18-630/3L	3	630A	185		Fixed installation (drill hole), three-phase synchronous operation and with fuse	
12	DNH18-630/3S	3	630A	185		Fixed installation (drill hole), three-phase separate operation and with fuse	
13	DNH18-630/3LD	3	630A	185		Fixed installation (drill hole), three-phase synchronous operation and with fuse isolation knife	
14	DNH18-630/311L	3	630A	185		Hanging installation, with auxiliary contacts, three-phase synchronous operation and with fuse.	
Remarks	1. Please refer to the model no. definition of the vertical fuse switch disconnector to choose the right items in demand.						
	2.Other accessories, such as wiring terminals, please refer to the vertical fuse switch disconnector accessories list.						

DNH18M
Fuse Switch Disconnect

Widely used in wind power, photovoltaic, energy storage, power grid, communications, high-end equipment manufacturing and other industries.

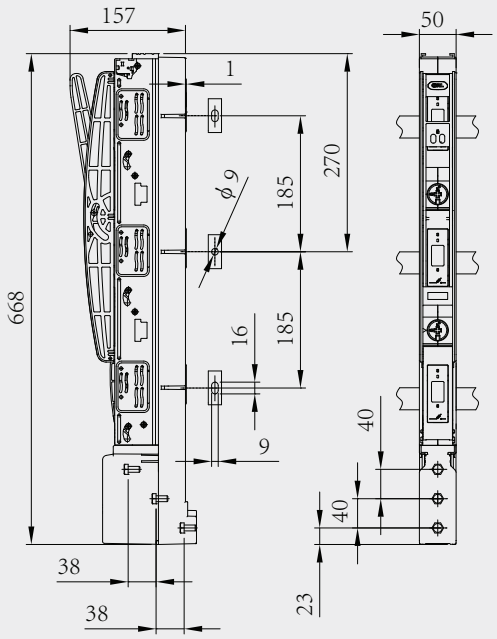
Technical Parameters

Model No.	Size	Rated Voltage(V)	Rated Current (A)	Rated insulation voltage	Rated impulse withstand voltage
DNH18-160/30M	00	AC800V	63A	AC1250V	12kV
DNH18-250/30M	1	AC800V	160A	AC1250V	12kV
DNH18-630/30M	3	AC800V	315A	AC1250V	12kV

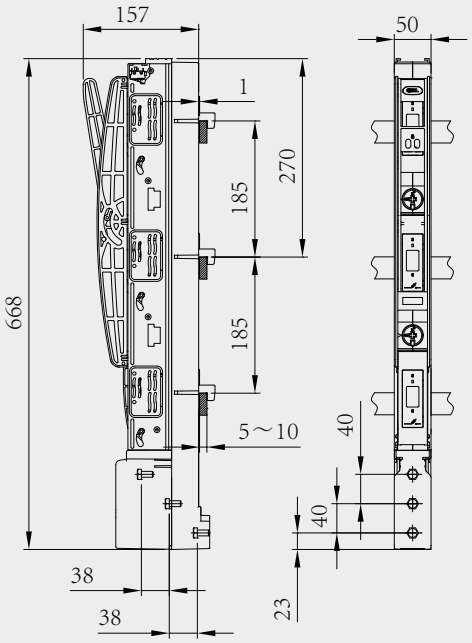
DNH18
Fuse Switch Disconnector

DNH18-160/3L

3L Fixed type installation diagram

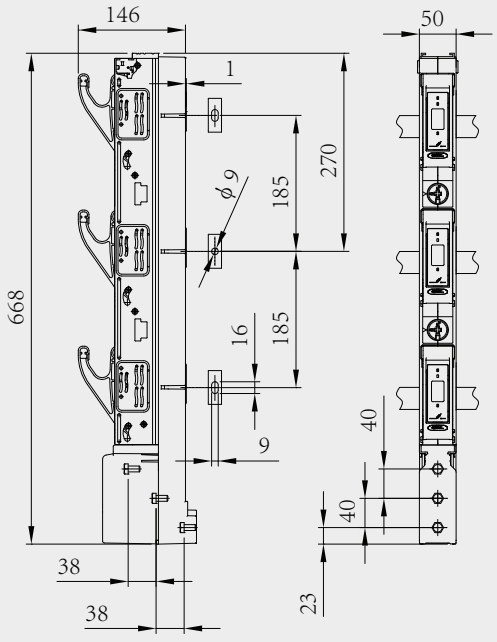


3L Hanging type installation diagram



DNH18-160/3S

3S Fixed type installation diagram



3S Hanging type installation diagram