

DNH1-160/3S□ Fuse Switch Disconnecter



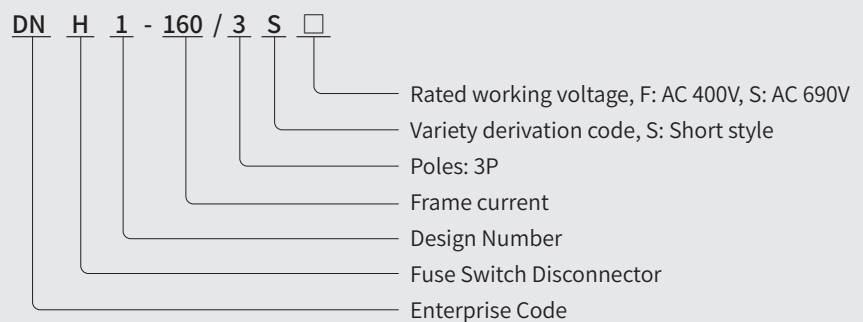
Product brief introduction

The DNH1-160/3S□ series Fuse Switch Disconnecter switch (hereinafter referred to as the switch) is mainly used in distribution circuits and motor circuits with high short-circuit currents. It serves as a power switch, isolation switch, emergency switch, and is also used for AC circuit protection.

Applicable standard

GB/T 14048.3、IEC 60947-3

Model and Meaning



Main technical parameters

Product model	DNH1-160/3SF	DNH1-160/3SS
Rated operating voltage Ue	AC 400V	AC 690V
Fuse size	000	000
Frame-rated Operational Current Ie	160A	100A
Frame-size Conventional Thermal Current Ith	160A	100A
Fuse rated operating current Ie	2A~160A	2A~80A
Usage category (with fuse)	AC-23B	AC-23B
Rated short-circuit current Iq (with fuse)	80kA	
Rated insulation voltage Ui	1500V	
Rated impulse withstand voltage Uimp	12kV	
Rated frequency	50/60Hz	
Mechanical life	1400 times	
Electrical life	200 times	
Maximum tightening torque	≤ 7N. m	
Level of protection	On: IP20 / Off: IP30	
Way to install	Vertical installation	
Mounting type	Rail-mounted installation / Fixed installation	
Ordered separately	One always open, one always closed; two always open, two always closed.	
Product certification	CCC、CE	

Other parameters

Normal working conditions	See page 10.
Product dimensions	See page 11.

DNH1GM Fuse Switch Disconnecter



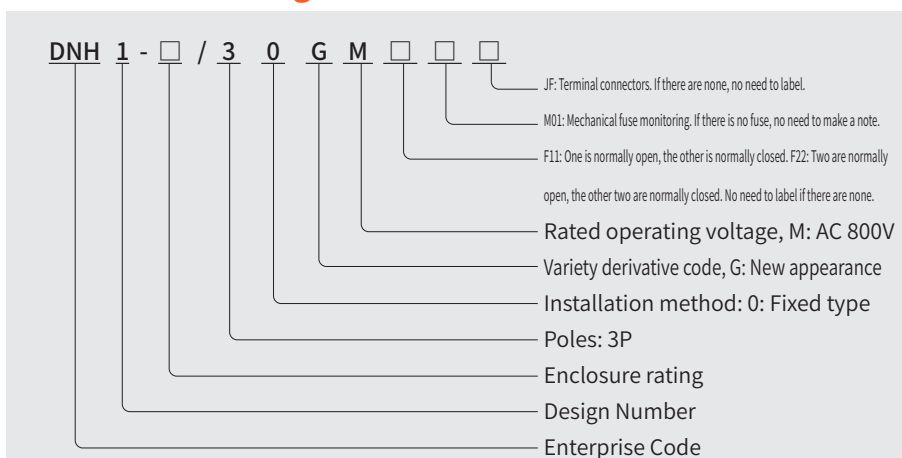
Product brief introduction

The DNH1GM series Fuse Switch Disconnecter (hereinafter referred to as the "switch") are applicable to rated insulation voltages of AC 1000V/AC 1250V, with a frequency of 50/60Hz and a working voltage of AC 800V. They are mainly used in power distribution circuits and motor circuits with high short-circuit currents, serving as power switches, disconnectors, and emergency switches, and for circuit protection. This switch is not intended for directly opening and closing individual motors. When the switch is replaced by an isolating knife instead of a fuse, this switch loses the function of overcurrent and short-circuit protection and only meets the requirements for circuit isolation as specified by this switch.

Applicable standard

GB/T 14048.3、IEC 60947-3

Model and Meaning



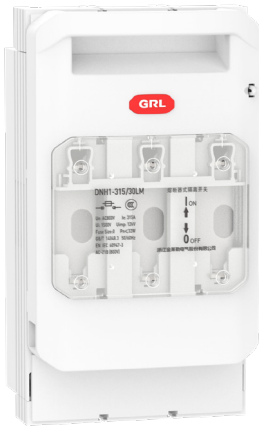
Main technical parameters

Product model	DNH1-160/30GM	DNH1-250/30GM	DNH1-630/30GM
Rated operating voltage Ue	AC 800V		
Fuse size	000 00	1	3
Frame-rated Operational Current Ie	100A 63A	160A	315A
Frame-size Conventional Thermal Current Ith	100A 63A	160A	315A
Fuse rated operating current Ie	2A~100A 2A~63A	4A~160A	160A~315A
Usage category (with fuse)	AC-21B		
Rated short-circuit current Iq (with fuse)	80kA 30kA	100kA	100kA
Rated insulation voltage Ui	1250V 1000V 1000V		
Rated impulse withstand voltage Uimp	12kV 12kV 12kV		
Rated frequency	50/60Hz 50Hz 50Hz		
Mechanical life	1400 times	1400 times	800 times
Electrical life	200 times	200 times	200 times
Maximum tightening torque	≤ 12N. m	≤ 20N. m	≤ 28N. m
Level of protection	On: IP20 / Off: IP30		
Way to install	vertical installation		
Mounting type	Fixed installation		
Ordered separately	Protective cover, auxiliary switch, mechanical fuse monitoring		
Product certification	CCC, CE, CB	TÜV, CCC, CE, CB	

Other parameters

Normal working conditions	See page 10.
Product dimensions	See page 12.

DNH1-315/30LM Fuse Switch Disconnecter



Product brief introduction

The DNH1-315/30LM Fuse Switch Disconnecter is a new product specially designed by our company to meet the market demands of wind power box transformers and other equipment. It features an attractive appearance and a compact structure, and can be used for line isolation. It also has functions such as overload and short-circuit protection.

Applicable standard

GB/T 14048.3、IEC 60947-3

Model and Meaning

DNH 1 - 315 / 3 0 L M □ □ □

- JF: Terminal connectors. If there are none, no need to label.
- M01: Mechanical fuse monitoring. If there is no fuse, no need to make a note.
- F11: One is normally open, the other is normally closed. F22: Two are normally open, the other two are normally closed. No need to label if there are none.
- Rated operating voltage, M: AC 800V
- Variety derivative code, G: New appearance
- Installation method: 0: Fixed type
- Poles: 3P
- Enclosure rating
- Design Number
- Enterprise Code

Main technical parameters

Product model		DNH1-315/30LM		
Rated operating voltage Ue		AC 800V		
Frame-rated Operational Current Ie		315A		
Frame-size Conventional Thermal Current Ith		315A		
Usage category (with fuse)		AC-21B		
Rated short-circuit current Iq (with fuse)		50kA		
Rated insulation voltage Ui		1500V		
Rated impulse withstand voltage Uimp		12kV		
Rated frequency		50/60Hz		
Electrical life		200 times		
Operating force		≤ 150N		
Level of protection		On: IP20 / Off: IP30		
Way to install		Vertical installation		
Mounting type		Fixed installation		
Ordered separately		One normally open and one normally closed, mechanical fuse monitoring, and spaced partition boards		
Product certification		CCC		
Fuse	Size	0		
	Rated operating current In	0.5In(In=315A)	0.8In(In=315A)	1.0In(In=315A)
	Power consumption Pn	≤10W	≤29W	≤48W
	When using aR type semiconductor equipment to protect fuses, the capacity must be reduced.	The reduction coefficient is typically between 0.5 and 0.7.		

Other parameters

Normal working conditions	See page 10.
Product dimensions	See page 10.

DNH1GP Fuse Switch Disconnecter



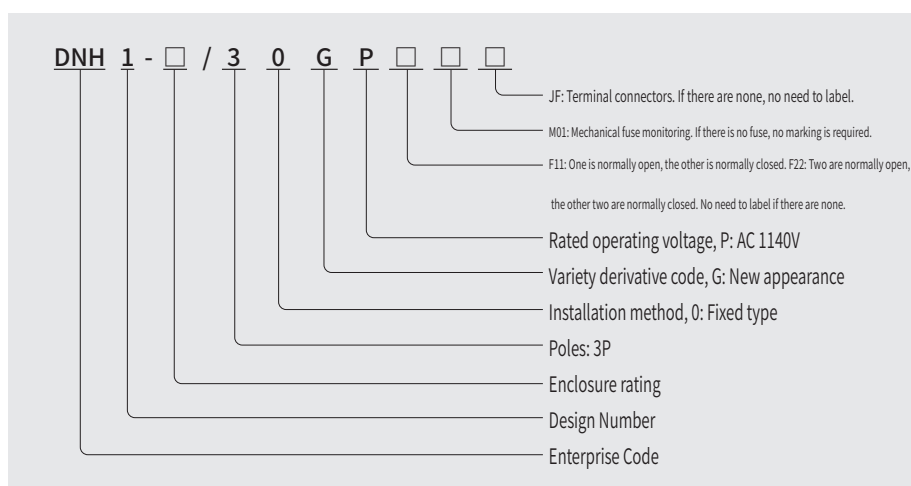
Product brief introduction

The DNH1-□/□□□P series fuse-type isolator is suitable for a rated insulation voltage of AC 1250V, with a frequency of 50/60Hz and a working voltage of AC 1140V. It is mainly used in power distribution circuits and motor circuits with high short-circuit currents for circuit protection. When the switch replaces the fuse with an isolation knife, this switch will not have the functions of circuit overload and short-circuit protection, and can only meet the line isolation requirements specified by this switch.

Applicable standard

GB/T 14048.3、IEC 60947-3

Model and Meaning



Main technical parameters

Product model	DNH1-250/30GP	DNH1-630/30GP
Rated operating voltage Ue	AC 1140V	AC 1140V
Fuse size	1	3
Frame-rated Operational Current Ie	160A	315A
Frame-size Conventional Thermal Current Ith	160A	315A
Fuse rated operating current Ie	6A~160A	200A~315A
Usage category (with fuse)	AC-20B	
Rated short-circuit current Iq (with fuse)	80kA	
Rated insulation voltage Ui	1250V	
Rated impulse withstand voltage Uimp	12kV	
Rated frequency	50/60Hz	
Maximum tightening torque	≤ 20N. m	≤ 28N. m
Level of protection	On: IP20 / Off: IP30	
Way to install	Vertical installation	
Mounting type	Fixed installation	
Ordered separately	Protective cover, auxiliary switch, mechanical fuse monitoring	

Other parameters

Normal working conditions	See page 10.
Product dimensions	See page 12.

DNH1-160/3SP Fuse Switch Disconnecter



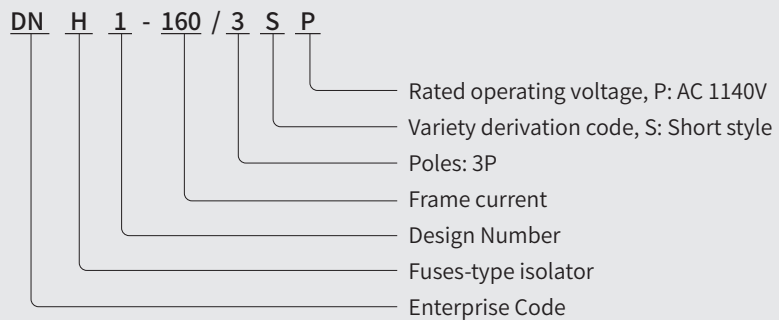
Product brief introduction

DNH1-160/3SP is mainly used in power distribution circuits and motor circuits with high short-circuit currents, and is employed for protection of AC circuits.

Applicable standard

GB/T 14048.3、IEC 60947-3

Model and Meaning



Main technical parameters

Product model	DNH1-160/3SP
Rated operating voltage Ue	AC 1140V
Fuse size	000
Frame-rated Operational Current Ie	63A
Frame-size Conventional Thermal Current Ith	63A
Fuse rated operating current Ie	2A-63A
Usage category (with fuse)	AC-20B
Rated short-circuit current Iq (with fuse)	80kA
Rated insulation voltage Ui	1500V
Rated impulse withstand voltage Uimp	12kV
Rated frequency	50/60Hz
Maximum tightening torque	≤ 7N·m
Level of protection	On: IP20 / Off: IP30
Way to install	Vertical installation
Mounting type	Rail-mounted installation / Fixed installation
Ordered separately	One always open, one always closed; two always open, two always closed.
Product certification	CCC, CE

Other parameters

Normal working conditions	See page 10.
Product dimensions	See page 11.

DNH1-160/30LP Fuse Switch Disconnecter



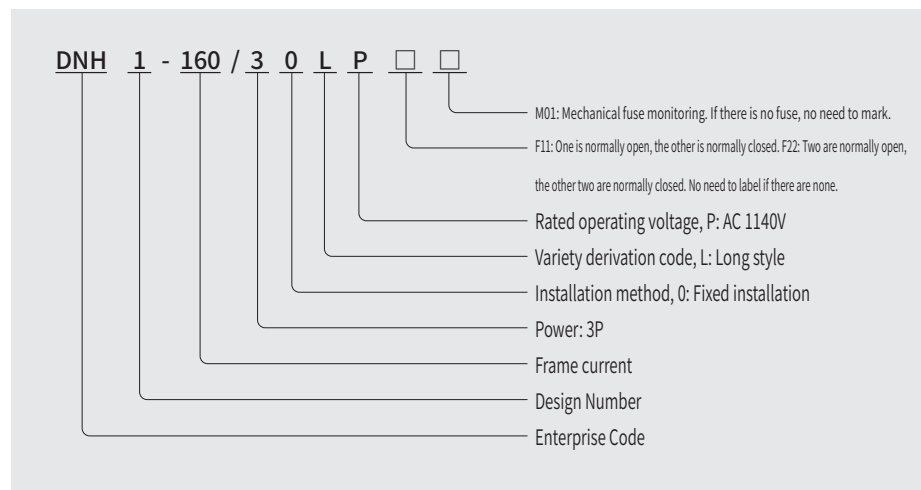
Product brief introduction

The DNH1-160/30LP fuse-type isolator is a newly designed product by our company to meet the market demands of wind power box transformers, etc. The product has an attractive appearance and a compact structure. It can be used as a line isolation device and is equipped with functions such as overload and short-circuit protection.

Applicable standard

GB/T 14048.3、IEC 60947-3

Model and Meaning



Main technical parameters

Product model	DNH1-160/30LP
Rated operating voltage U_e	AC 1140V
Fuse size	0
Frame-rated Operational Current I_e	100A
Frame-size Conventional Thermal Current I_{th}	100A
Fuse rated operating current I_e	2A~100A
Usage category (with fuse)	AC-20B
Rated short-circuit current I_q (with fuse)	80kA
Rated insulation voltage U_i	1500V
Rated impulse withstand voltage U_{imp}	12kV
Rated frequency	50/60Hz
Maximum tightening torque	≤ 12 N. m
Level of protection	On: IP20 / Off: IP30
Way to install	Vertical installation
Mounting type	Fixed installation
Ordered separately	Auxiliary switch, mechanical fuse monitoring, phase separation plate
Product certification	CCC

Other parameters

Normal working conditions	See page 10.
Product dimensions	See page 10.

DNH1-630/30GU Fuse Switch Disconnecter



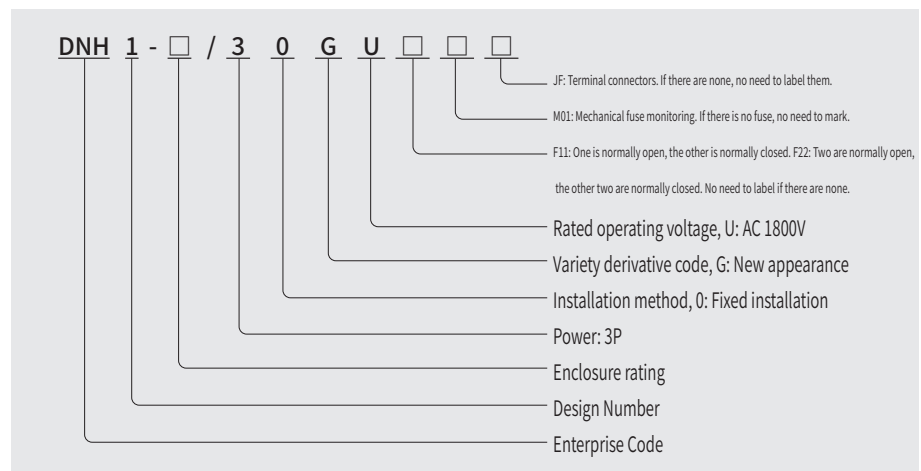
Product brief introduction

The DNH1-□/□□□U series fuse-type isolator is suitable for a rated insulation voltage of AC 2500V, a frequency of 50/60Hz, and a working voltage of AC 1800V. It is mainly used in power distribution circuits and motor circuits with high short-circuit currents for circuit protection. When the switch replaces the fuse with an isolation knife, this switch will not have the functions of circuit overload and short-circuit protection, and can only meet the line isolation requirements specified by this switch.

Applicable standard

GB/T 14048.3、IEC 60947-3

Model and Meaning



Main technical parameters

Product model	DNH1-630/30GU
Rated operating voltage Ue	AC 1800V
Fuse size	3
Frame-rated Operational Current Ie	100A
Frame-size Conventional Thermal Current Ith	100A
Fuse rated operating current Ie	16A~100A
Usage category (with fuse)	AC-20B
Rated short-circuit current Iq (with fuse)	80kA
Rated insulation voltage Ui	2500V
Rated impulse withstand voltage Uimp	18kV
Rated frequency	50Hz
Maximum tightening torque	≤ 28N. m
Level of protection	On: IP20 / Off: IP30
Way to install	Vertical installation
Mounting type	Fixed installation
Ordered separately	Protective cover, auxiliary switch and mechanical fuse monitoring function

Other parameters

Normal working conditions	See page 10.
Product dimensions	See page 12.

DNH1

Series Fuse Switch Disconnecter

Normal working conditions

Ambient temperature	-5°C to +40°C, for +40°C to +70°C, the equipment can only be used at reduced capacity. The reduction coefficient is shown in Table 1.
Elevation	≤2000m, installation at 2000m - 5000m requires reduced capacity usage. The reduction coefficient is shown in Table 2.
Humidity	When the ambient air temperature reaches the maximum +40°C, the relative humidity of the air does not exceed 50%. At lower temperatures, the relative humidity can be higher.
Class of pollution	The pollution level of the surrounding environment is 3rd grade.
Installation category	Type III and Type IV (Model DNH1-3S is of Type III)
Installation condition	It should be installed vertically in a place without significant shaking, impact vibration or rain/snow intrusion. At the same time, the installation location should be free of explosive hazardous media, and the medium should not contain gases or dust that can corrode metals or damage insulation.
Matters need attention	The switch should not bear any additional mechanical stress, and the external cables should be fixed using insulators or similar means.

Temperature reduction coefficient (current)

Table 1

Temperature (° C)	+40	+45	+50	+55	+60	+65	+70
Reduction factor	1 In	0.982 In	0.963 In	0.944 In	0.924 In	0.904 In	0.882 In

Altitude reduction coefficient (current)

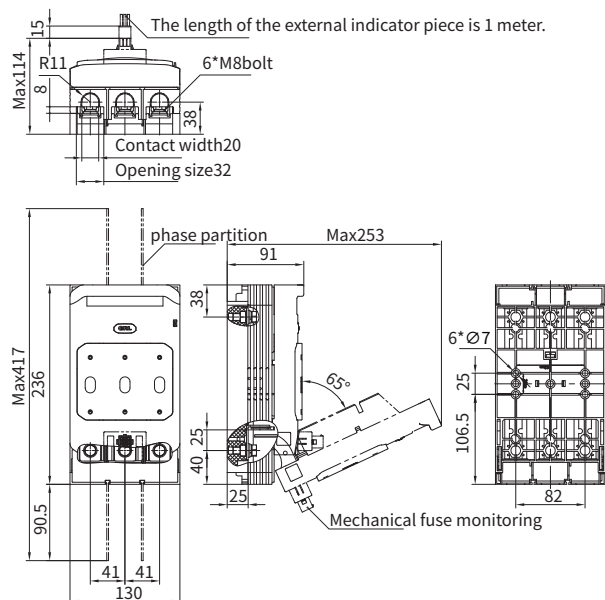
Table 2

Altitude (m)	2000	3000	4000	5000
Reduction factor	1 In	0.98 In	0.94 In	0.92 In

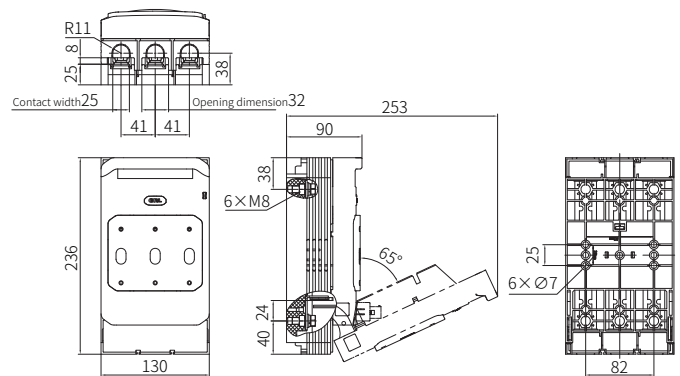
Explanation: 1. Temperature reduction capacity example: When the temperature reaches +70°C, the selected 160A fuse core should be $160 * 0.882 = 141.12A$ according to the table. The switch should actually be able to carry the maximum rated current: 141.12A.
 2. Altitude reduction capacity example: When the altitude reaches 5000 meters, the selected 160A fuse core should be $160 * 0.921 = 147.36A$ according to the table. The switch should actually be able to carry the maximum rated current: 147.36A.

Shape and installation dimensions (mm)

DNH1-160/30LP



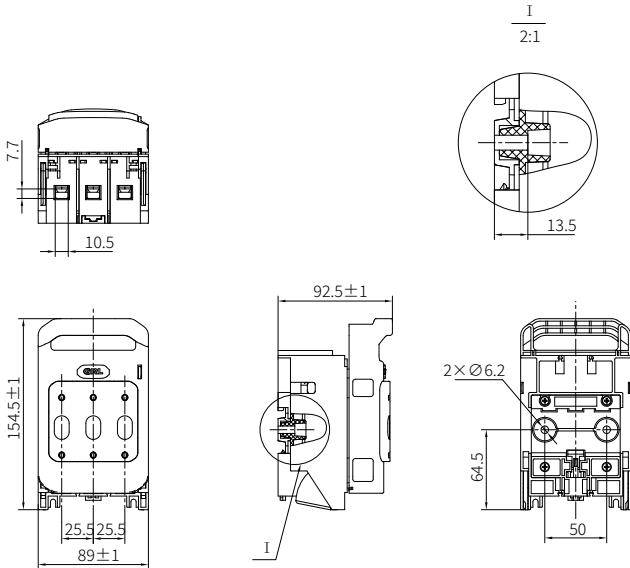
DNH1-315/30LM



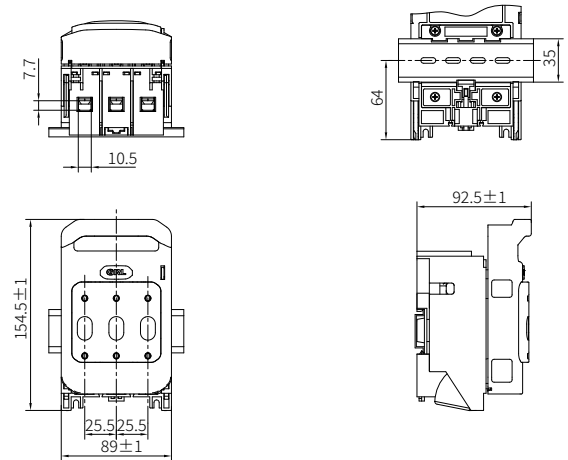
DNH1 Series Fuse Switch Disconnecter

DNH1-160/3SS, DNH1-160/3SF

Fixed installation

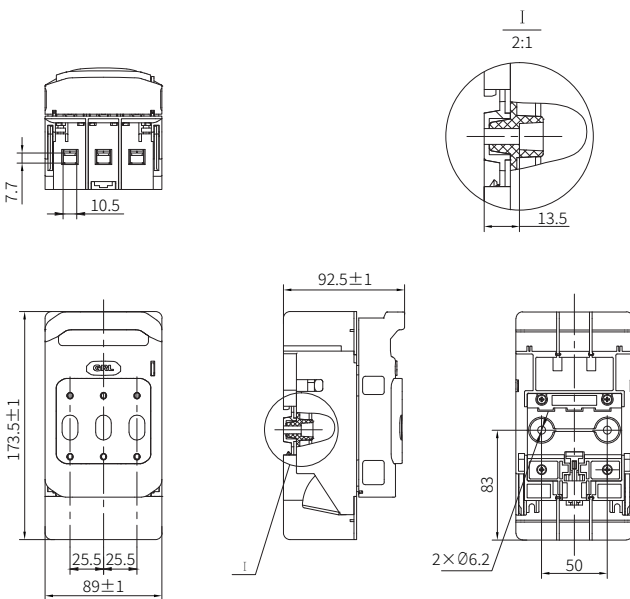


Rail-mounted installation

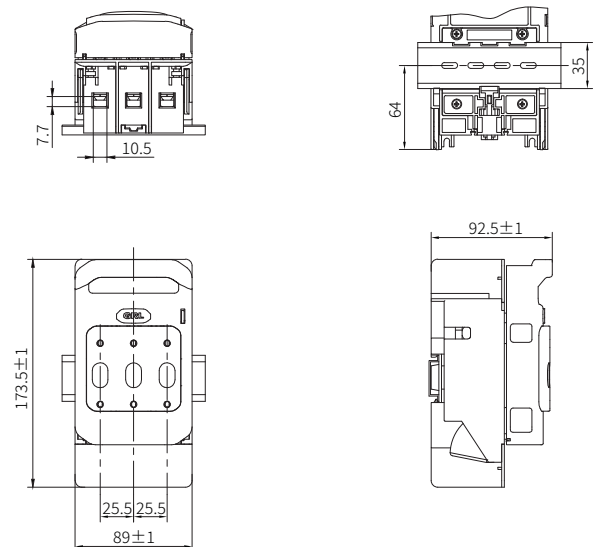


DNH1-160/3SM, DNH1-160/3SP

Fixed installation

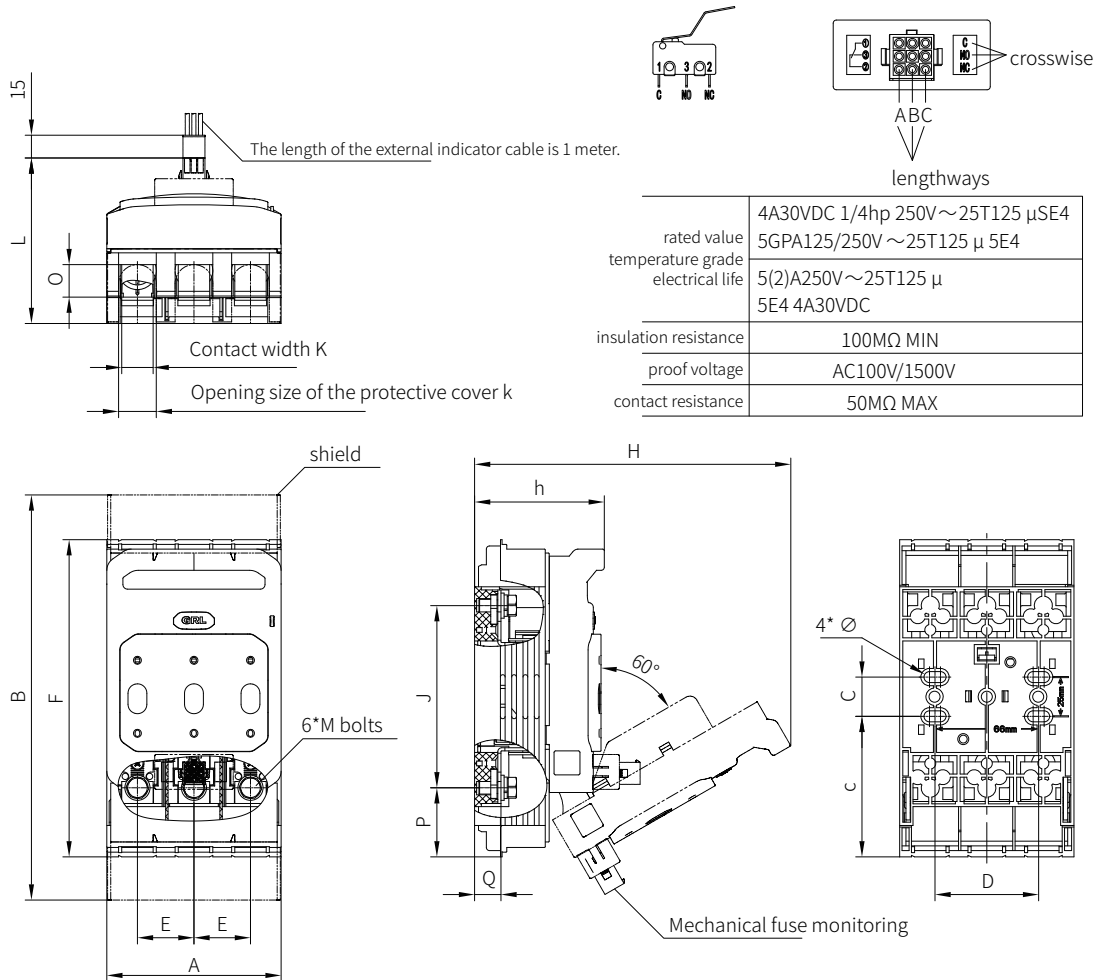


Rail-mounted installation



DNH1 Series Fuse Switch Disconnecter

DNH1G series fixed installation



Specifications and models	Boundary dimension												Installation dimension					
	A	B	E	F	H	h	J	K	k	L	O	P	Q	M	Ø	c	C	D
DNH1-160/30G	111	258	36	202	201	83	116	20	24	105	21	44	17	8	7	89.5	25	66
DNH1-160/30GM	111	258	36	202	201	83	116	20	24	105	21	44	17	8	7	89.5	25	66
DNH1-250/30G	185	350	57	247	287	111	185	30	33	133	18	20	23	10	11	87	50	114
DNH1-250/30GM	185	350	57	247	287	111	185	30	33	133	18	20	23	10	11	87	50	114
DNH1-250/30GP	185	350	57	247	287	111	185	30	33	133	18	20	23	10	11	87	50	114
DNH1-400/30G	211	357	65	288	333	128	210	33	43	150	43	25.5	26	10	11	105.5	50	130
DNH1-630/30G	256	363	81	302	351	143	210	40	43	165	50	37.5	30	12	11	117.5	50	162
DNH1-630/30GM	256	363	81	302	351	143	210	40	43	165	50	37.5	30	12	11	117.5	50	162
DNH1-630/30GP	256	363	81	302	351	143	210	40	43	165	50	37.5	30	12	11	117.5	50	162
DNH1-630/30GU	256	363	81	302	351	143	210	40	43	165	50	37.5	30	12	11	117.5	50	162
DNH1-800/30G	256	363	81	302	351	143	210	40	43	165	50	37.5	30	12	11	117.5	50	162