## HGLR Series



Model \& Meaning

(1) Code of company.
(2) Fuse combination switches.
(3) Conventional thermal current.
(4) Rated current $A$ for fuse-link.
(5) Number of poles:

3 poles, 4 poles ( 3 poles+on and off neutral pole )
(6) Side operation, no note for front operation.
(7) External operation standard extended shaft 330 mm If there is special requirements,mark after J , no note for internal operation.
(8) Auxiliary contact.
(9) The connection behind the board. Connection in front of board is not marked.
(10) Form: I modular (160A~1400A )

II integrated (400A~630A)

## Introduction

HGLR series fuse combination switches (hereinafter called as switch for short) is a kind of multi-poles hand-operated switch, adopting the shell made of unsaturated polyester resin reinforced with glass-fibres, having very high dielectric performance, protective capability and safe operation.

The operating device is an elastic-accumulating and accelerating instant-release device, which makes instant making and breaking of the double gap contact. It has no relation ship with the operation handle and thus greatly increase both the various electrical and mechanical performance. The fuse combination switches can assure the circuit to be turmed making and breaking under load, having reliable breaking protection against over-current or short-circuit apparent visible the off state.

Having strong humidity and heat resistant properties.
The switch has an artistic, novel, succinct, small-sized outline, but has various functions, being the best choice among the congeneric products.

## Example of model selection

HGLR-160A/3C
Conventional thermal current 160A, 3 poles, side operation side the board.

Note: Function in brackets will not be noted if it is not needed.
I : S-NO+NC S type auxiliary contacts
II: F-NO+NC S type auxiliary contacts

## HG[R Series

| 63 | $2,4,6,10,16,20,25,32,40,50,63$ | $00 C$ |
| :--- | :--- | :--- | :--- |
| 160 | $2,4,6,10,16,20,25,32,40,50,63,80,100,125,160$ | 00 |
| 250 | $16,20,25,40,50,63,80,100,125,160,200,250$ | 1 |
| 400 | $50,63,80,100,125,160,200,250,315,400$ | 2 |
| 630 | $200,250,300,400,500,630$ | 3 |
| 1250 | $800,1000,1250$ | 4 |

## Characteristies of products

※ The elastic-accumulation and instant-release mechanical realize the fast on and off ( $13.8 \mathrm{~m} /$ s). Having no relation ship with the speed of the handle and thus increasing various electrical properties.
※ The shell made of unsaturated polyester resin reinforced with glass fibres has fine fire-resistant dielectric and safe-operational properties.
※ The parallel double gap contact has self-cleaming function.
※ It can assure the circuit to be turmed making and breaking under load, and has relicable over-current and short-circuit protection function.
※ when change fuse, it can be safety, facility, fast.

## Normal work conditions and Installation conditions

※ Ambient temperature:- $5^{\circ} \mathrm{C} \sim 40^{\circ} \mathrm{C}$.
※ Altitude: shall not exceed 2000 m .
※ The atmosphere condition: The relative humidity shall not exceed $50 \%$ when the environmental temperature is $+40^{\circ} \mathrm{C}$ in installing place; And the relative humidity may be higher at the lowertemperature condition. Such as when the humidity is $90 \%$ when the temperature is $+20^{\circ} \mathrm{C}$. It shall take some special management to avoid the dew occurs on the product surface due to temperature change.
※ Pollution grade:III
※ The product shall be installed in the place without remarkable shake, strke and quiver, rain and snow, in the medium without danger of exploding, and in the places without gas and conductive dust, with can make the metal go rust and affect insulation performances.

## HGLR-63~1250 Type of fuse combination switches

HGLR-63~400 is of modular design structure.
HGLR-63~1250 is Overall design structure.

Ensure making and break under load, reliable over-current and short-circuit off-protection.

## Structures and operation forms:

※ Direct front operation: the handle is installed in front of the switch.
※ Direct side operation: the handle is installed at the right side of the switch.
※ Front operation outside the board: the handle is assembled at the front of the distributing board.
※ Side operation outside the board: the handle is assembled at the right side of the board .

F, S type of auxiliary contact can be provided.

## HGLR Series

HGLR-63~1250 Sketch diagram of fuse combination switches


## HGLR Series

Electrical and mechanical properties of HGLR-63~1250 type of fuse combination switch

| Conventional thermal current Ith (A) | 63 | 160 | 250 | 400 | 630 | 1250 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RT16 fuse-link dimension NT | 00 C | 00 C | 1 | 2 | 3 | 4 |
| Rated insulation voltage Ui (V) | 750 | 750 | 750 | 750 | 750 | 750 |
| Dielectric strength (V) |  |  |  |  |  |  |
| Rated surge-resistant voltage (Uimp KV) | 6 | 6 | 6 | 6 | 6 | 6 |


| Rated working current le (A) | 63 | 160 | 250 | 400 | 630 | 1250 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 380 V | AC-23B |  | 160 | 250 | 400 | 630 | 1250 |
| 660 V | AC-21B | 50 | 50 | 50 | 50 | 50 | 50 |


| Connected with breaking capacity(A Rms) |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Rated making capability | 630 | 1600 | 2500 | 4000 | 6300 | 10000 |
| Rated breaking capability | 504 | 1280 | 2000 | 3200 | 5040 | 10000 |


| Operating performance | 1700 | 1400 | 1400 | 800 | 800 | 500 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| Mechanical durability 380 V | 300 | 200 | 200 | 200 | 200 | 100 |
| Electrical curability 380V | 1700 | 1400 | 1400 | 800 | 800 | 500 |
| Mechanical durability 660V |  |  |  |  |  |  |


| Weight (kg) | 1 | 1.8 | 3.2 | 4.8 | 16 | 28 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 poles | 1.3 | 2.3 | 4.5 | 6.1 | 19 | 33 |

## HGLR Series

## HGLR-63~400 Overall \& Installation Dimension

Front operation 63



Door hole

Front operation 160~400


| Specification | A | B | C | D | E | H | M | K | N | P | U | L | ФX |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HGLR-63A/3 | 154 |  | 191 | 121 | 117 | 96 | 63 | 90 |  | 32 | 115 | 5 |  |
| HGLR-63A/4 | 186 |  | 191 | 121 | 117 | 128 | 63 | 90 |  | 32 | 115 | 5 |  |
| HGLR-160A/3 | 167 | 162 | 192 | 121 | 127 | 108 | 67 | 90 | 141 | 36 | 115 | 5 | 9 |
| HGLR-160A/4 | 203 | 162 | 192 | 121 | 127 | 144 | 67 | 90 | 141 | 36 | 115 | 5 | 9 |
| HGLR-250A/3 | 239 | 195 | 200 | 165 | 146 | 180 | 93 | 137 | 165 | 60 | 145 | 6 | 11 |
| HGLR-250A/4 | 323 | 195 | 200 | 165 | 146 | 240 | 117 | 137 | 165 | 60 | 145 | 6 | 11 |
| HGLR-400A/3 | 281 | 205 | 200 | 170 | 149 | 198 | 122 | 137 | 175 | 66 | 145 | 6 | 11 |
| HGLR-400A/4 | 347 | 205 | 200 | 170 | 149 | 264 | 122 | 137 | 175 | 66 | 145 | 6 | 11 |

## HGLR Series

HGLR-630~1250 Sketch diagram of fuse combination switches

Side drection operation of 63



Door hole

Front operation 160~400


| Specification | A | B | C | D | E | F | H | K | N | P | L | G | ФX |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| HGLR-63A/3C | 140 |  | 20 | 121 | 117 | 40 | 96 | 90 |  | 32 | 5 | 94 |  |
| HGLR-63A/4C | 172 |  | 20 | 121 | 117 | 40 | 128 | 90 |  | 32 | 5 | 94 |  |
| HGLR-160A/3C | 152 | 162 | 20 | 121 | 127 | 40 | 108 | 90 | 141 | 36 | 5 | 104 | 9 |
| HGLR-160A/4C | 188 | 162 | 20 | 121 | 127 | 40 | 144 | 90 | 141 | 36 | 5 | 104 | 9 |
| HGLR-250A/3C | 224 | 195 | 20 | 165 | 146 | 18 | 180 | 137 | 165 | 60 | 6 | 123 | 11 |
| HGLR-250A/4C | 314 | 195 | 50 | 165 | 146 | 18 | 240 | 137 | 165 | 60 | 6 | 123 | 11 |
| HGLR-400A/3C | 272 | 205 | 50 | 170 | 149 | 15 | 198 | 147 | 175 | 66 | 6 | 126 | 11 |
| HGLR-400A/4C | 338 | 205 | 50 | 170 | 149 | 15 | 264 | 147 | 175 | 66 | 6 | 126 | 11 |

## HGLR Series

HGLR-630 Overall \& Installation Dimension

Front operation 630/4


Front operation 630/3


## Door hole



Front operation outside the borad 630


## HGLR Series

HGLR-1250 Overall \& Installation Dimension

Front operation 1250/4


Front operation 1250/3



Front operation outside the borad 1250


