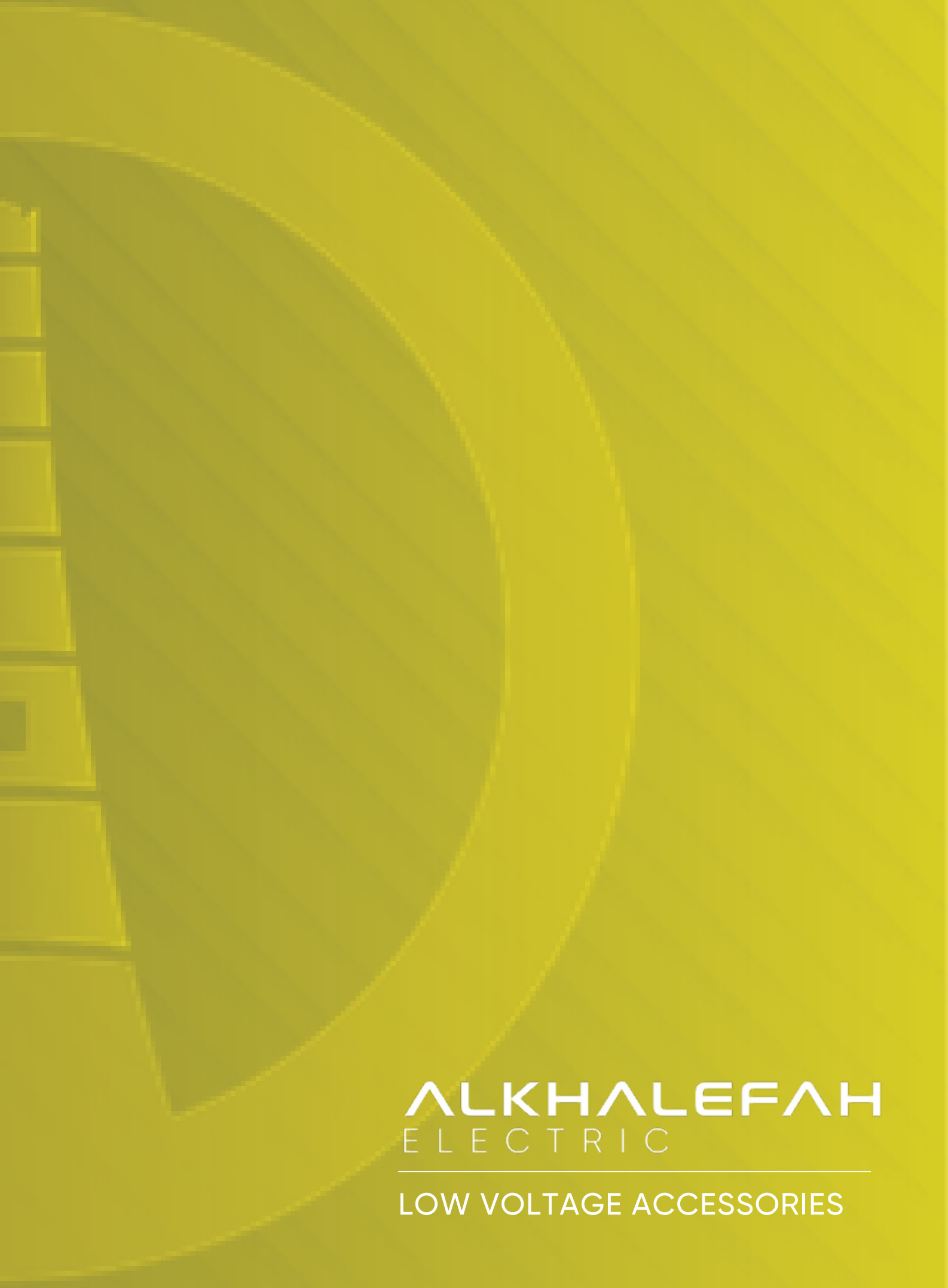




**ALKHALEFAH**  
ELECTRIC

---

LOW VOLTAGE ACCESSORIES







**Alkhalefah Industries** is a leading manufacturer and supplier of high-quality industrial products, serving a wide range of industries, including construction, infrastructure, and manufacturing. Established in 1994, our factory has built a solid reputation for delivering innovative solutions that meet the rigorous demands of today's industrial landscape. Alkhalefah Industries is a prominent Saudi factory aiming to emerge as a global leader in the production and supply of firefighting equipment and high-quality electrical products and services.

We Alkhalefah Industries are proud to contribute in Saudi Arabia's industry through establishments, specialization, partnerships, and eager to excellence.

**Alkhalefah Electric** is a prominent Saudi factory established in 1994, specializing in electrical solutions. It is a trusted partner of the Saudi Electricity Company (SEC) and collaborates with renowned global electrical companies such as Schneider, ABB, and LS. With over two decades of experience, Alkhalefah Electric has built a strong reputation for delivering high-quality electrical products and services. We offer a comprehensive range of solutions, including distribution panels, switchgear, s transformers, control systems, and automation solutions.

**Alkhalefah Firefighting**, established in 1994, Riyadh, Saudi Arabia , aims to emerge as a global leader in the production and supply of firefighting equipment. Our specialization lies in providing comprehensive solutions for various high-quality firefighting equipment. Our team comprises highly skilled and committed professionals from diverse backgrounds worldwide. The products manufactured in our facility undergo rigorous certification processes by UL, FM, BSI, LPCB, and Global Mark, ensuring strict compliance with International standards.





# INTRODUCTION

Electricity is central to our modern way of life, powering our homes, workplaces, and industries every day. As indispensable as it is, electricity also demands diligent handling and robust safety measures, especially when it is meant to be operated by ordinary people. At **Alkhalefah**, we are fully committed to your safety and the well-being of those around you, which is why we've engineered our Low Voltage Accessories with high-quality components and advanced protective features. These measures not only safeguard your electrical system but also grant you peace of mind in any environment.



NH2 HRC Fuses 200A, 500V, 80/120KA  
As per SEC 34-SDMS-02 Latest Rev.



### PURPOSE

These high-breaking capacity fuse-links are intended for the protection of power lines and equipment, against overloads and short-circuits with rated voltages up to 500V AC.

The rated breaking capacity is 80kA at 500V. Manufactured with a ceramic body with high withstand to internal pressure and thermal shock, which allows a high breaking capacity. Knife contacts are made of tin-plated copper or brass. They are manufactured according to IEC/EN60269

### FEATURES

- According to IEC60269, DIN 43620, GB13539 and CE Safety, ROHS certificate.
- Rated voltage: AC500V/690V or DC 440V
- Rated current: 2A~1250A.
- Exception: Size 00 with DC 250V
- Operating class: 1 : gL /gG for cable and conductor protection  
2: aM for motor protection 3: aR for semiconductor protection
- Finely graduated selectivity
- Rated breaking capacity: AC120kA (Size 00: AC 50kA)

### NH FUSE LINK FEATURES:

- According to IEC60269, DIN 43620, GB13539 and CE Safety, ROHS certificate.
- Rated voltage: AC500V/690V or DC 440V
- Rated Current: 2A~1250A
- Exception: Size 00 with DC 250V
- Operating class: 1. gL/gG for cable and conductor protection, 2. aM for motor protection, 3. aR for semiconductor protection
- Finely graduated selectivity
- Rated breaking capacity: AC 120kA (Size 00: AC 50kA)



| Size  | In (A) | Capacity (VA)           |                      |                      | Fig     | Weight (g) |
|-------|--------|-------------------------|----------------------|----------------------|---------|------------|
|       |        | Operating Class (gL/gG) | Operating Class (aM) | Operating Class (aR) |         |            |
| NH00C | 2      | 002GNH00C               | 002MNH00C            | 002RNH00C            | Fig.1.1 | 150        |
|       | 4      | 004GNH00C               | 004MNH00C            | 004RNH00C            |         |            |
|       | 6      | 006GNH00C               | 006MNH00C            | 006RNH00C            |         |            |
|       | 10     | 010GNH00C               | 010MNH00C            | 010RNH00C            |         |            |
|       | 16     | 016GNH00C               | 016MNH00C            | 016RNH00C            |         |            |
|       | 20     | 020GNH00C               | 020MNH00C            | 020RNH00C            |         |            |
|       | 25     | 025GNH00C               | 025MNH00C            | 025RNH00C            |         |            |
|       | 32     | 032GNH00C               | 032MNH00C            | 032RNH00C            |         |            |
|       | 35     | 035GNH00C               | 035MNH00C            | 035RNH00C            |         |            |
|       | 40     | 040GNH00C               | 040MNH00C            | 040RNH00C            |         |            |
|       | 50     | 050GNH00C               | 050MNH00C            | 050RNH00C            |         |            |
|       | 63     | 063GNH00C               | 063MNH00C            | 063RNH00C            |         |            |
|       | 80     | 080GNH00C               | 080MNH00C            | 080RNH00C            |         |            |
|       | 100    | 100GNH00C               | 100MNH00C            | 100RNH00C            |         |            |
| NH00  | 2      | 002GNH00                | 002MNH00             | 002RNH00             | Fig.1.1 | 185        |
|       | 4      | 004GNH00                | 004MNH00             | 004RNH00             |         |            |
|       | 6      | 006GNH00                | 006MNH00             | 006RNH00             |         |            |
|       | 10     | 010GNH00                | 010MNH00             | 010RNH00             |         |            |
|       | 16     | 016GNH00                | 016MNH00             | 016RNH00             |         |            |
|       | 20     | 020GNH00                | 020MNH00             | 020RNH00             |         |            |
|       | 25     | 025GNH00                | 025MNH00             | 025RNH00             |         |            |
|       | 32     | 032GNH00                | 032MNH00             | 032RNH00             |         |            |



|      |     |          |          |          |         |     |
|------|-----|----------|----------|----------|---------|-----|
| NH00 | 40  | 040GNH00 | 040MNH00 | 040RNH00 | Fig.1.1 | 185 |
|      | 50  | 050GNH00 | 050MNH00 | 050RNH00 |         |     |
|      | 50  | 063GNH00 | 063MNH00 | 063RNH00 |         |     |
|      | 50  | 080GNH00 | 080MNH00 | 080RNH00 |         |     |
|      | 50  | 100GNH00 | 100MNH00 | 100RNH00 |         |     |
|      | 50  | 125GNH00 | 125MNH00 | 125RNH00 |         |     |
|      | 50  | 160GNH00 | 160MNH00 | 160RNH00 |         |     |
| NH0  | 50  | 002GNH0  | 002MNH0  | 002RNH0  | Fig.1.2 | 255 |
|      | 50  | 004GNH0  | 004MNH0  | 004RNH0  |         |     |
|      | 50  | 006GNH0  | 006MNH0  | 006RNH0  |         |     |
|      | 50  | 010GNH0  | 010MNH0  | 010RNH0  |         |     |
|      | 50  | 016GNH0  | 016MNH0  | 016RNH0  |         |     |
|      | 50  | 020GNH0  | 020MNH0  | 020RNH0  |         |     |
|      | 50  | 025GNH0  | 025MNH0  | 025RNH0  |         |     |
|      | 50  | 032GNH0  | 032MNH0  | 032RNH0  |         |     |
|      | 50  | 040GNH0  | 040MNH0  | 040RNH0  |         |     |
|      | 50  | 050GNH0  | 050MNH0  | 050RNH0  |         |     |
|      | 50  | 063GNH0  | 063MNH0  | 063RNH0  |         |     |
|      | 50  | 080GNH0  | 080MNH0  | 080RNH0  |         |     |
|      | 50  | 100GNH0  | 100MNH0  | 100RNH0  |         |     |
|      | 50  | 125GNH0  | 125MNH0  | 125RNH0  |         |     |
|      | 50  | 160GNH0  | 160MNH0  | 160RNH0  |         |     |
| NH1  | 63  | 063GNH1  | 063MNH1  | 063RNH1  | Fig.1,2 | 475 |
|      | 80  | 080GNH1  | 080MNH1  | 080RNH1  |         |     |
|      | 100 | 100GNH1  | 100MNH1  | 100RNH1  |         |     |

## FUSE LINKS



|     |      |          |          |          |         |      |
|-----|------|----------|----------|----------|---------|------|
| NH1 | 125  | 125GNH1  | 125MNH1  | 125RNH1  | Fig.1,2 | 475  |
|     | 160  | 160GNH1  | 160MNH1  | 160RNH1  |         |      |
|     | 200  | 200GNH1  | 200MNH1  | 200RNH1  |         |      |
|     | 224  | 224GNH1  | 224MNH1  | 224RNH1  |         |      |
|     | 250  | 250GNH1  | 250MNH1  | 250RNH1  |         |      |
| NH2 | 80   | 080GNH2  | 080MNH2  | 080RNH2  | Fig.1,2 | 700  |
|     | 100  | 100GNH2  | 100MNH2  | 100RNH2  |         |      |
|     | 125  | 125GNH2  | 125MNH2  | 125RNH2  |         |      |
|     | 160  | 160GNH2  | 160MNH2  | 160RNH2  |         |      |
|     | 200  | 200GNH2  | 200MNH2  | 200RNH2  |         |      |
|     | 224  | 224GNH2  | 224MNH2  | 224RNH2  |         |      |
|     | 250  | 250GNH2  | 250MNH2  | 250RNH2  |         |      |
|     | 300  | 300GNH2  | 300MNH2  | 300RNH2  |         |      |
|     | 315  | 315GNH2  | 315MNH2  | 315RNH2  |         |      |
|     | 355  | 355GNH2  | 355MNH2  | 355RNH2  |         |      |
| NH3 | 400  | 400GNH2  | 400MNH2  | 400RNH2  | Fig.1,2 | 935  |
|     | 300  | 300GNH3  | 300MNH3  | 300RNH3  |         |      |
|     | 315  | 315GNH3  | 315MNH3  | 315RNH3  |         |      |
|     | 355  | 355GNH3  | 355MNH3  | 355RNH3  |         |      |
|     | 400  | 400GNH3  | 400MNH3  | 400RNH3  |         |      |
|     | 425  | 425GNH3  | 425MNH3  | 425RNH3  |         |      |
|     | 500  | 500GNH3  | 500MNH3  | 500RNH3  |         |      |
| NH4 | 630  | 630GNH3  | 630MNH3  | 630RNH3  | Fig.1,3 | 2260 |
|     | 630  | 630GNH4  | 630MNH4  | 630RNH4  |         |      |
|     | 1000 | 1000GNH4 | 1000MNH4 | 1000RNH4 |         |      |
|     | 1250 | 1250GNH4 | 1250MNH4 | 1250RNH4 |         |      |



## NH-FUSE BASES

For NH fuse links

- According to IEC60269, DIN 43620, GB13539 and CE Safety, ROHS certificate
- Rated voltage: AC500V/AC690V or for semiconductor-protecting-insert -part AC1 000V

| Product photo                                                                      | Size                           | Order No.                                         | Fig     | Weight(g) |      |
|------------------------------------------------------------------------------------|--------------------------------|---------------------------------------------------|---------|-----------|------|
|  | Rated Current 160A             |                                                   |         |           |      |
|                                                                                    | NT00<br>Sist101                | Single-pole for double busbar terminal connection | NT00FB  | Fig,1.7   | 170  |
|                                                                                    | Rated Current 250A             |                                                   |         |           |      |
|                                                                                    | NH1<br>Sist1201                | Single-pole for double busbar terminal connection | NH1FB   | Fig,1.9   | 500  |
|                                                                                    | Rated Current 400A             |                                                   |         |           |      |
|                                                                                    | NH2<br>Sist1401                | Single-pole for double busbar terminal connection | NH2FB   | Fig,1.10  | 520  |
|                                                                                    | Rated Current 630A             |                                                   |         |           |      |
|                                                                                    | NH3<br>Sist1601                | Single-pole for double busbar terminal connection | NH3FB   | Fig,1.11  | 760  |
|                                                                                    | Rated Current 1250A            |                                                   |         |           |      |
|                                                                                    | NH4<br>Sist11001               | Single-pole for double busbar terminal connection | NH4FB   | Fig,1.6   | 2500 |
|                                                                                    | Rated Current 400A             |                                                   |         |           |      |
|                                                                                    | NH2<br>Sist1401                | Triple-pole for double busbar terminal connection | NH2FB3P | Fig,1.12  | 3600 |
|                                                                                    | Rated insulation Voltage 1000V |                                                   |         |           |      |
|                                                                                    | NH<br>Handle                   | For NH000-NH4                                     | NH-H    | Fig,1.13  | 250  |



## NH-FUSE BASES

Dimension drawing

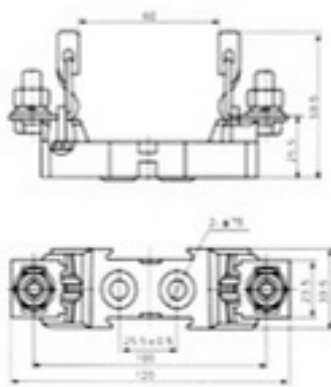


Fig.1.7

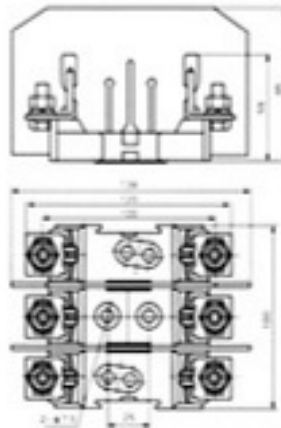


Fig.1.8

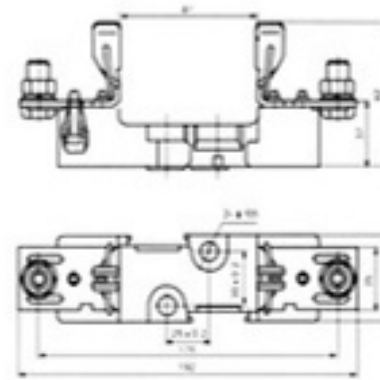


Fig.1.9

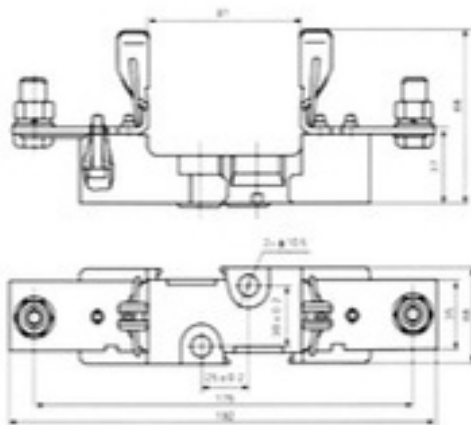


Fig.1.10

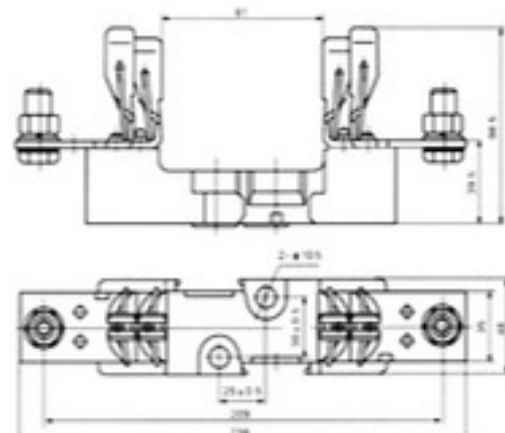


Fig.1.11

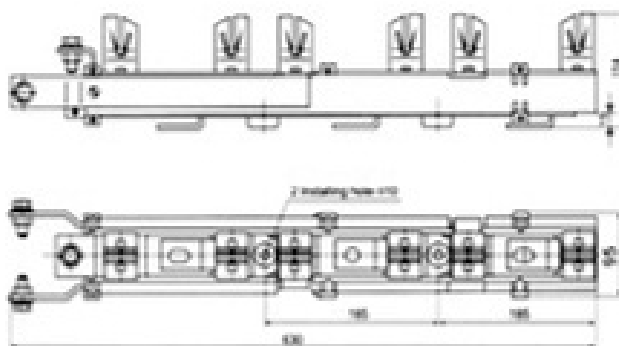


Fig.1.12

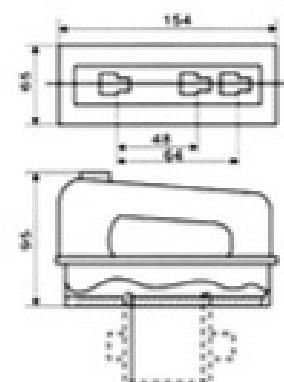
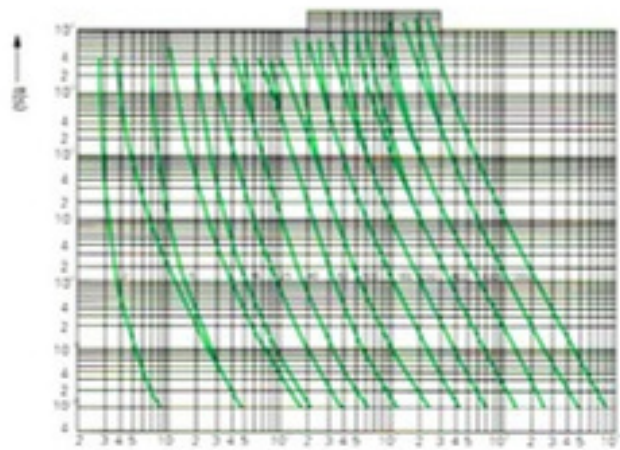


Fig.1.13

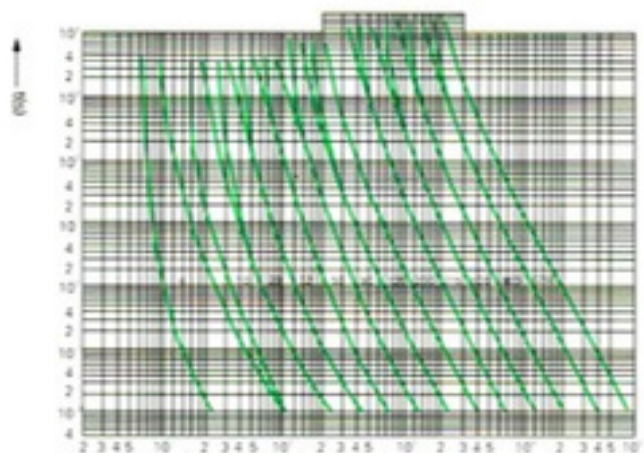


CHARACTERISTIC CURVES



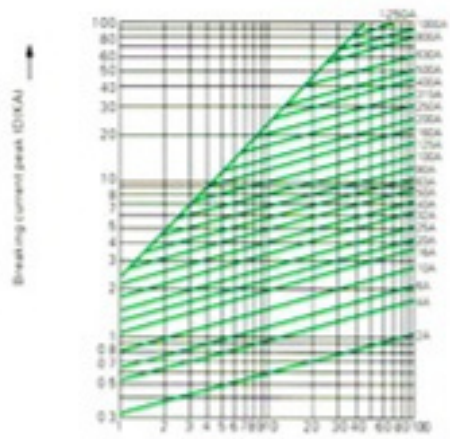
Perspective Current (virtral value)  $I_p(A)$  →

Time Current range of 'gG' fuse links



Perspective Current (virtral value)  $I_p(A)$  →

Time Current range of 'gG' fuse links



Perspective Current symmetrical (virtral value)  $I_p(A)$  →

Breaking current characteristics curve of 'gG' fuse links



FEATURES

According to IEC 269,BS88,GB13539

- Rated voltage: AC 415V,AC 500V
- Operating class: 1 :gL/gG for conductor protection 2:aR for semiconductor protection
- Rated breaking capacity: AC 100 kA

| Product photo | Size       | In A | Operating Class(gL/gL) | Operating Class(aR) | Fig     | Weight(g) |
|---------------|------------|------|------------------------|---------------------|---------|-----------|
|               | J-82/48X30 | 20   | 020GJ82                | 020RJ82             | Fig.7.4 | 230       |
|               |            | 25   | 025GJ82                | 025RJ82             |         |           |
|               |            | 32   | 032GJ82                | 032RJ82             |         |           |
|               |            | 40   | 040GJ82                | 040RJ82             |         |           |
|               |            | 50   | 050GJ82                | 050RJ82             |         |           |
|               |            | 63   | 063GJ82                | 063RJ82             |         |           |
|               |            | 80   | 080GJ82                | 080RJ82             |         |           |
|               |            | 100  | 100GJ82                | 100RJ82             |         |           |
|               |            | 125  | 125GJ82                | 125RJ82             |         | 380       |
|               |            | 160  | 160GJ82                | 160RJ82             |         |           |
|               |            | 200  | 200GJ82                | 200RJ82             |         |           |
|               |            | 250  | 250GJ82                | 250RJ82             |         |           |
|               |            | 300  | 300GJ82                | 300RJ82             |         |           |
|               |            | 315  | 315GJ82                | 315RJ82             |         |           |
|               |            | 355  | 355GJ82                | 355RJ82             |         |           |
|               |            | 400  | 400GJ82                | 400RJ82             |         |           |



| Product photo                                                                     | Size       | In A | Operating Class(gL/gL) | Operating Class(aR) | Fig     | Weight(g) |
|-----------------------------------------------------------------------------------|------------|------|------------------------|---------------------|---------|-----------|
|  | J-92/50X38 | 20   | 020GJ92                | 020GR92             | Fig.7.4 | 330       |
|                                                                                   |            | 25   | 025GJ92                | 025GR92             |         |           |
|                                                                                   |            | 32   | 032GJ92                | 032GR92             |         |           |
|                                                                                   |            | 40   | 040GJ92                | 040GR92             |         |           |
|                                                                                   |            | 50   | 050GJ92                | 050GR92             |         |           |
|                                                                                   |            | 63   | 063GJ92                | 063GR92             |         |           |
|                                                                                   |            | 80   | 080GJ92                | 080GR92             |         |           |
|                                                                                   |            | 100  | 100GJ92                | 100GR92             |         |           |
|                                                                                   |            | 125  | 125GJ92                | 125GR92             |         | 450       |
|                                                                                   |            | 160  | 160GJ92                | 160GR92             |         |           |
|                                                                                   |            | 200  | 200GJ92                | 200GR92             |         |           |
|                                                                                   |            | 250  | 250GJ92                | 250GR92             |         |           |
|                                                                                   |            | 300  | 300GJ92                | 300GR92             |         |           |
|                                                                                   |            | 315  | 315GJ92                | 315GR92             |         |           |
|                                                                                   |            | 355  | 355GJ92                | 355GR92             |         |           |
|                                                                                   |            | 400  | 400GJ92                | 400GR92             |         |           |

## DIMENSION DRAWING

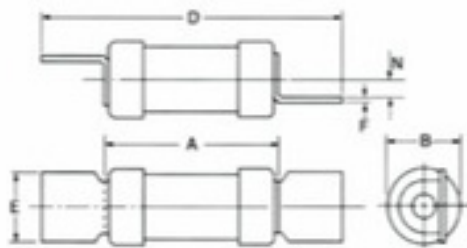


Fig.7.1

| Size            | A    | B    | D    | E    | F   | N   |
|-----------------|------|------|------|------|-----|-----|
| SSD             | 32.0 | 12.0 | 47.0 | 13.0 | 0.8 | 3.2 |
| NSD&NSD20M      | 34.5 | 13.8 | 58.5 | 12.7 | 0.8 | 3.5 |
| NSD20M36&NSD32M | 34.5 | 17.5 | 25.5 | 12.7 | 0.8 | 3.5 |
| ESD-32A         | 35.5 | 13.8 | 68.0 | 15.0 | 12  | 3.5 |
| ESD40-63A       | 35.5 | 17.5 | 68.0 | 15.0 | 12  | 3.5 |
| ESD63M          | 35.5 | 21.0 | 68.0 | 15.0 | 12  | 3.5 |

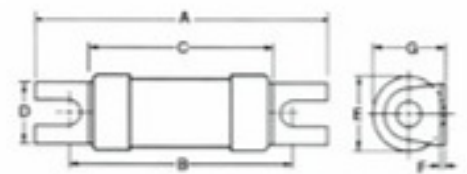


Fig.7.2

| Size    | A    | B    | C    | D    | E    | F   | G    |
|---------|------|------|------|------|------|-----|------|
| NITD    | 55.0 | 44.0 | 34.6 | 11.2 | 13.8 | 0.8 | 14.0 |
| NITD32M | 55.0 | 44.0 | 34.6 | 11.2 | 17.5 | 1.2 | 18.5 |

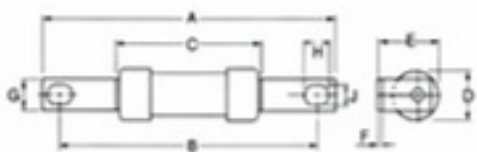
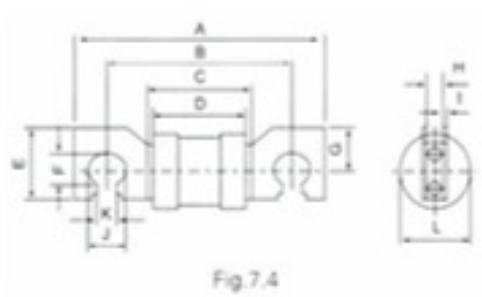


Fig.7.3

| Size              | A    | B   | C    | D    | E    | F   | G    | H    | J   |
|-------------------|------|-----|------|------|------|-----|------|------|-----|
| AAO               | 85   | 73  | 35.5 | 13.7 | 14.0 | 1.2 | 8.7  | 8.0  | 5.5 |
| AAO32M            | 85   | 73  | 54.5 | 21.0 | 11.3 | 1.2 | 8.7  | 8.0  | 5.5 |
| BAO               | 87   | 73  | 54.5 | 21.0 | 22.5 | 1.2 | 12.7 | 8.0  | 5.5 |
| BAO63M            | 87   | 73  | 54.5 | 21.0 | 22.5 | 1.2 | 12.7 | 8.0  | 5.5 |
| CEO               | 110  | 94  | 58.5 | 21.0 | 24.5 | 3.2 | 14.3 | 11.0 | 8.7 |
| CEO100M 125 & 160 | 110  | 94  | 58.5 | 25.8 | 26.8 | 3.2 | 14.3 | 11.0 | 8.7 |
| CEO100M200        | 110  | 94  | 47.0 | 31.0 | 29.5 | 3.2 | 19.0 | 10.0 | 9.0 |
| OSD               | 95.0 | 73  | 54.5 | 21.0 | 22.5 | 1.2 | 12.7 | 8.0  | 5.5 |
| OSD100M           | 95.0 | 73  | 54.5 | 26.0 | 25.7 | 1.2 | 12.7 | 8.0  | 5.5 |
| DEO               | 110  | 110 | 47.0 | 31.0 | 29.5 | 3.2 | 19.0 | 10.0 | 9.0 |
| DEO200M           | 110  | 110 | 47.0 | 31.0 | 29.5 | 3.2 | 19.0 | 10.0 | 9.0 |



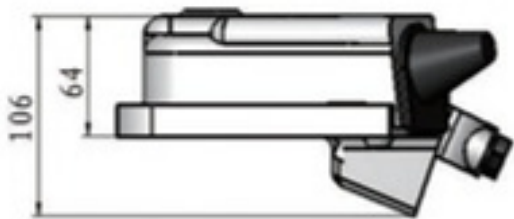
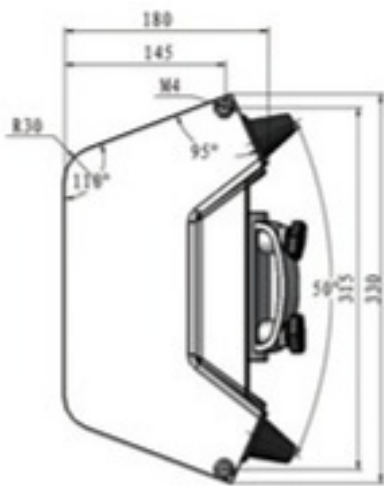
| Size        | A   | B  | C    | D    | E  | F    | G    | H   | I   | J    | K    | L  |
|-------------|-----|----|------|------|----|------|------|-----|-----|------|------|----|
| J-82(≤300A) | 110 | 82 | 45.2 | 40.5 | 30 | 14.8 | 18   | 6.5 | 2.4 | 17.5 | 9.8  | 31 |
| J-82(>300A) | 110 | 82 | 44.8 | 40   | 30 | 14.4 | 16   | 6.5 | 2.4 | 17.5 | 9.8  | 36 |
| J-92        | 131 | 92 | 46.8 | 40   | 39 | 17.4 | 20.7 | 8.7 | 3.2 | 20.7 | 10.9 | 38 |

BOLTING TYPE FUSES HOLDER

This series fuse holder is suitable for J types 82mm fuse link, rated current to 400A. It is mainly used for protecting the electrical circuit against overload and short circuits (gG'gL); it also may derive for protecting the semiconductor device and others complete set installment from short-circuit (aR) as well as the electric motor from short-circuit (aM). The rated breaking capability for this series fuse is to 415V 80KA. This series fuse conforms to national standard GB13539 and international electrical committee standard IEC60269.



DIMENSION DRAWING





## PURPOSE AND FEATURES

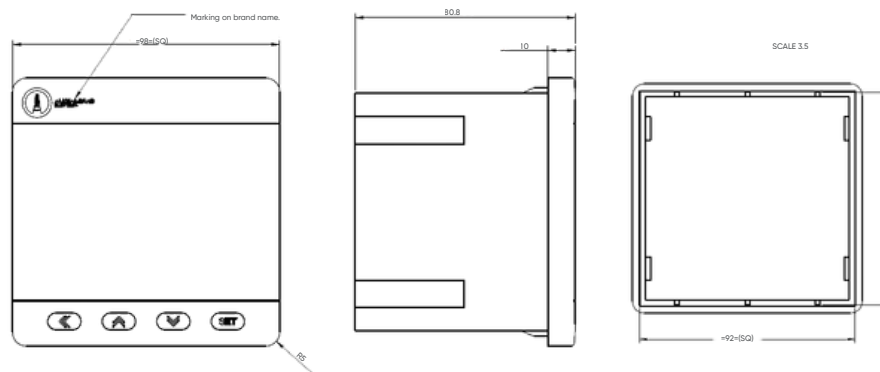
The Low Voltage Digital Panel Meter from Alkhalefah Industries Electrical Division is an approved panel meter for Saudi Electric Company, meeting the stringent requirements of 38-SDMS-03. This reliable and accurate meter is Type Tested as per IEC 62052, ensuring it meets international standards for performance and safety. Ideal for various electrical applications, it offers precise measurement and dependable operation.

## TYPE OF MEASUREMENT

1. Basic current and voltage measurement
2. Split-phase active and reactive power measurement
3. Total active and reactive energy
4. Total apparent power
5. Active and reactive total power
6. Frequency average Average power factor
7. Four-quadrant electrical energy

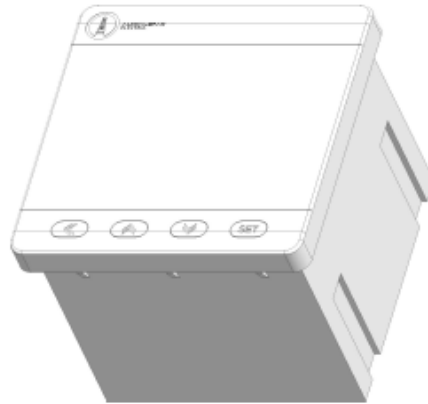


## DIMENSIONS





## TECHNICAL PARAMETER



| Description           | Low Voltage Panel Meter                                             | Model | KFDM-01 |
|-----------------------|---------------------------------------------------------------------|-------|---------|
| Dimensions            | 96mm x 96mm                                                         | Input | 220V AC |
| PRIMARY FEATURES      |                                                                     |       |         |
| Power Supply          | 220 Volts AC                                                        |       |         |
| Current Signal        | Three(3) Phase current incoming terminals                           |       |         |
| Voltage Signal        | Three(3) phase voltage input                                        |       |         |
| Relay output          | 4-channel relay output                                              |       |         |
| Transmitting output   | 4-channel, 4-20mA transmitting output                               |       |         |
| Electric Energy pulse | Can be connected to the positive terminals of external power supply |       |         |
| Communication         | RS485 compatible                                                    |       |         |
| Switching input       | 8-channel switching input                                           |       |         |



### PRODUCT OVERVIEW

- Primary current: 150A-4000A
- Secondary current: 5A/1A
- Rated voltage: 720V
- Rated frequency: 50/60HZ
- Compliant with standard: IEC61869-1 & IEC61869-2
- Power frequency withstand voltage: 3kV
- Current transformers corrensoined to the Saudi Electricity Co Standards: 50-SDMS-01



### CONDITIONS OF USE

Installation location: Indoor

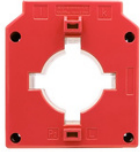
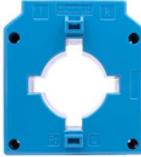
- Environmental temperature: Up to 55 °c
- Environmental humidity: Relative humidity not exceeding 80%
- Altitude: not exceeding 1 000m
- Atmospheric conditions: There is no severe pollution in the atmosphere
- The installation location is not directly exposed to sunlight, and there is no erosion from rain or snow

Current Transformers (CT) are specialized devices primarily used to measure high currents safely and accurately. They step down the primary current to a lower secondary current suitable for measurement or monitoring purposes. CTs provide galvanic isolation between the primary and secondary circuits, achieved through the physical separation of windings. CT rating up to 4000/5A.



CTs are generally classified into two categories based on their application: measuring transformers and protection transformers. Measuring CTs are designed for direct connection to meters and other measuring equipment, safeguarding them from overcurrent while ensuring accurate readings. Protection CTs, on the other hand, are intended for use with protective devices in electrical systems, enabling reliable fault detection and response to maintain system safety.



| Product images                                                                      | Model   | Capacity | Accuracy Class | Number of core turns | Product size (mm)                                                                     |
|-------------------------------------------------------------------------------------|---------|----------|----------------|----------------------|---------------------------------------------------------------------------------------|
|    | 300/5A  | 10VA     | Class0.5       | 1                    |    |
|    | 400/5A  | 10VA     | Class0.5       | 1                    |    |
|    | 500/5A  | 10VA     | Class0.5       | 1                    |    |
|   | 600/5A  | 10VA     | Class0.5       | 1                    |   |
|  | 800/5A  | 10VA     | Class0.5       | 1                    |  |
|  | 1500/5A | 10VA     | Class0.5       | 1                    |  |
|  | 3000/5A | 10VA     | Class0.5       | 1                    |  |
|  | 4000/5A | 10VA     | Class0.5       | 1                    |  |



### COPPER LUG



### PRODUCT OVERVIEW

Cable lugs are devices used for connecting cables to electrical appliances, other cables, surfaces, or mechanisms. Made from raw material with highest quality, there is three types of cable lugs, Aluminum, Copper and Bi-Metallic Lugs.

- Application: Used for connection of copper cable with copper end of electrical equipment in medium voltage.
- Material: Cu  $\geq 99.9\%$
- Surface: Tin plated
- Feature: Clear markings on barrel to indicate correct crimping location, together with DIN standard crimping die.
- Standard: DIN 46235





## TECHNICAL PARAMETER

| Item     | Dimensions (mm) |             |                  |     |    |        |
|----------|-----------------|-------------|------------------|-----|----|--------|
|          | $\varphi E$     | $\varphi D$ | $\varphi d$ (mm) | W   | B  | L (mm) |
| DIN6-5   | 5.3             | 5.5         | 3.8              | 8.5 | 10 | 30.5   |
| DIN6-6   | 5.5             | 5.5         | 3.8              | 8.5 | 10 | 31.5   |
| DIN6-8   | 8.4             | 5.5         | 3.8              | 13  | 13 | 34     |
| DIN10-5  | 5.3             | 6           | 4.5              | 9   | 9  | 34     |
| DIN10-6  | 6.4             | 6           | 4.5              | 9   | 9  | 34.5   |
| DIN10-8  | 8.4             | 6           | 4.5              | 13  | 13 | 37     |
| DIN16-10 | 10.5            | 6           | 4.5              | 15  | 15 | 39     |
| DIN16-6  | 6.4             | 8.5         | 5.5              | 13  | 13 | 43.5   |
| DIN16-8  | 8.4             | 8.5         | 5.5              | 13  | 13 | 46     |
| DIN16-10 | 10.5            | 8.5         | 5.5              | 17  | 17 | 48     |
| DIN16-12 | 13              | 8.5         | 5.5              | 18  | 18 | 49     |
| DIN25-6  | 6.4             | 10          | 7                | 14  | 14 | 45.5   |
| DIN25-8  | 8.4             | 10          | 7                | 16  | 16 | 48     |
| DIN25-10 | 10.5            | 10          | 7                | 17  | 17 | 50     |
| DIN25-12 | 13              | 10          | 7                | 19  | 19 | 51     |
| DIN35-6  | 6.4             | 12.5        | 8.2              | 17  | 17 | 49.5   |
| DIN35-8  | 8.4             | 12.5        | 8.2              | 17  | 17 | 52     |
| DIN35-10 | 10.5            | 12.5        | 8.2              | 19  | 19 | 54     |
| DIN35-12 | 13              | 12.5        | 8.2              | 21  | 21 | 55     |
| DIN35-14 | 15              | 12.5        | 8.2              | 21  | 21 | 56.5   |
| DIN50-8  | 8.4             | 14.5        | 10               | 20  | 20 | 62     |



|           |      |      |      |    |    |      |
|-----------|------|------|------|----|----|------|
| DIN50-10  | 10.5 | 14.5 | 10   | 22 | 28 | 64   |
| DIN50-12  | 13.5 | 14.5 | 10   | 24 | 28 | 65   |
| DIN50-14  | 15   | 14.5 | 10   | 24 | 28 | 66.5 |
| DIN50-16  | 17   | 14.5 | 10   | 24 | 28 | 68   |
| DIN70-8   | 8.4  | 16.5 | 11.5 | 24 | 28 | 65   |
| DIN70-10  | 10.5 | 16.5 | 11.5 | 24 | 28 | 67   |
| DIN70-12  | 13   | 16.5 | 11.5 | 24 | 28 | 68   |
| DIN70-14  | 15   | 16.5 | 11.5 | 24 | 28 | 69.5 |
| DIN70-16  | 17   | 16.5 | 11.5 | 30 | 28 | 71   |
| DIN95-8   | 8.4  | 19   | 13.5 | 28 | 35 | 77   |
| DIN95-10  | 10.5 | 19   | 13.5 | 28 | 35 | 77   |
| DIN95-12  | 13   | 19   | 13.5 | 28 | 35 | 78   |
| DIN95-14  | 15   | 19   | 13.5 | 28 | 35 | 79.5 |
| DIN95-16  | 17   | 19   | 13.5 | 32 | 35 | 81   |
| DIN120-10 | 10.5 | 21   | 15.5 | 30 | 35 | 85   |
| DIN120-12 | 13   | 21   | 15.5 | 30 | 35 | 86   |
| DIN120-14 | 15   | 21   | 15.5 | 30 | 35 | 88   |
| DIN120-16 | 17   | 21   | 15.5 | 30 | 35 | 89   |
| DIN120-20 | 21   | 21   | 15.5 | 38 | 35 | 91   |
| DIN150-10 | 10.5 | 23.5 | 17   | 34 | 35 | 93   |
| DIN150-12 | 13   | 23.5 | 17   | 34 | 35 | 94   |
| DIN150-14 | 15   | 23.5 | 17   | 34 | 35 | 97   |
| DIN150-16 | 17   | 23.5 | 17   | 34 | 35 | 97   |
| DIN150-20 | 21   | 23.5 | 17   | 40 | 35 | 99   |



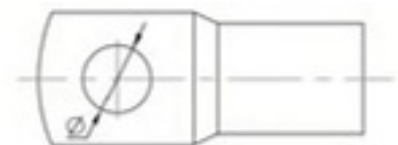
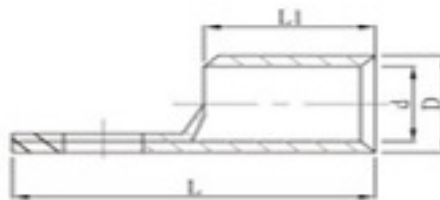
|            |      |      |      |    |     |     |
|------------|------|------|------|----|-----|-----|
| DIN185-10  | 10.5 | 25.5 | 19   | 37 | 40  | 97  |
| DIN185-12  | 13   | 25.5 | 19   | 37 | 40  | 98  |
| DIN185-14  | 15   | 25.5 | 19   | 37 | 40  | 101 |
| DIN185-16  | 17   | 25.5 | 19   | 37 | 40  | 101 |
| DIN185-20  | 21   | 25.5 | 19   | 40 | 40  | 103 |
| DIN240-12  | 13   | 29   | 21.5 | 42 | 40  | 108 |
| DIN240-14  | 15   | 29   | 21.5 | 42 | 40  | 111 |
| DIN240-16  | 17   | 29   | 21.5 | 42 | 40  | 111 |
| DIN240-20  | 21   | 29   | 21.5 | 45 | 40  | 113 |
| DIN300-12  | 13   | 32   | 24.5 | 46 | 50  | 119 |
| DIN300-14  | 15   | 32   | 24.5 | 46 | 50  | 119 |
| DIN300-16  | 17   | 32   | 24.5 | 46 | 50  | 119 |
| DIN300-20  | 21   | 32   | 24.5 | 46 | 50  | 122 |
| DIN400-14  | 15   | 38.5 | 27.5 | 55 | 70  | 140 |
| DIN400-16  | 17   | 38.5 | 27.5 | 55 | 70  | 140 |
| DIN400-20  | 21   | 38.5 | 27.5 | 55 | 70  | 140 |
| DIN500-16  | 17   | 42   | 31   | 60 | 70  | 150 |
| DIN500-20  | 21   | 42   | 31   | 60 | 70  | 150 |
| DIN625-16  | 17   | 44   | 34.5 | 64 | 80  | 160 |
| DIN625-20  | 21   | 44   | 34.5 | 64 | 80  | 160 |
| DIN800-16  | 17   | 52   | 40   | 75 | 100 | 195 |
| DIN800-20  | 21   | 52   | 40   | 75 | 100 | 195 |
| DIN1000-16 | 17   | 58   | 44   | 85 | 100 | 195 |
| DIN1000-20 | 21   | 58   | 44   | 85 | 100 | 195 |



## TECHNICAL PARAMETER

| Type        | $\varphi$                                    | D    | d    | L1   | L   |
|-------------|----------------------------------------------|------|------|------|-----|
| SC(JGK)-1.5 | $\varphi 4 \varphi 5 \varphi 6$              | 3.5  | 1.8  | 7    | 19  |
| SC(JGK)-2.5 | $\varphi 4 \varphi 5 \varphi 6$              | 4    | 2.5  | 7    | 19  |
| SC(JGK)-4   | $\varphi 4 \varphi 5 \varphi 6$              | 4.8  | 3.1  | 8    | 20  |
| SC(JGK)-6   | $\varphi 5 \varphi 6 \varphi 8$              | 5.5  | 3.8  | 9    | 24  |
| SC(JGK)-10  | $\varphi 6 \varphi 8$                        | 6.7  | 5    | 9    | 25  |
| SC(JGK)-16  | $\varphi 6 \varphi 8 \varphi 10$             | 7.5  | 5.8  | 11   | 30  |
| SC(JGK)-25  | $\varphi 6 \varphi 8 \varphi 10 \varphi 12$  | 9    | 7    | 12.5 | 33  |
| SC(JGK)-35  | $\varphi 6 \varphi 8 \varphi 10 \varphi 12$  | 10.5 | 8.3  | 14.5 | 38  |
| SC(JGK)-50  | $\varphi 8 \varphi 10 \varphi 12$            | 12.5 | 9.9  | 17   | 45  |
| SC(JGK)-70  | $\varphi 8 \varphi 10 \varphi 12$            | 14.5 | 11.6 | 18   | 49  |
| SC(JGK)-95  | $\varphi 8 \varphi 10 \varphi 12 \varphi 16$ | 17.5 | 14.1 | 19   | 55  |
| SC(JGK)-120 | $\varphi 12 \varphi 16$                      | 19.5 | 15.7 | 23   | 62  |
| SC(JGK)-150 | $\varphi 12 \varphi 16$                      | 20.5 | 16.6 | 28   | 68  |
| SC(JGK)-185 | $\varphi 12 \varphi 16$                      | 23.5 | 18.9 | 32   | 77  |
| SC(JGK)-240 | $\varphi 12 \varphi 16$                      | 26   | 21.4 | 36   | 88  |
| SC(JGK)-300 | $\varphi 12 \varphi 16$                      | 30   | 24.2 | 42   | 100 |
| SC(JGK)-400 | $\varphi 12 \varphi 16$                      | 34   | 27.2 | 46   | 110 |
| SC(JGK)-500 | $\varphi 16 \varphi 20$                      | 38   | 30.2 | 48   | 121 |
| SC(JGK)-630 | $\varphi 16 \varphi 20$                      | 45   | 35.2 | 55   | 138 |

## EXTERNAL DIMENSIONS





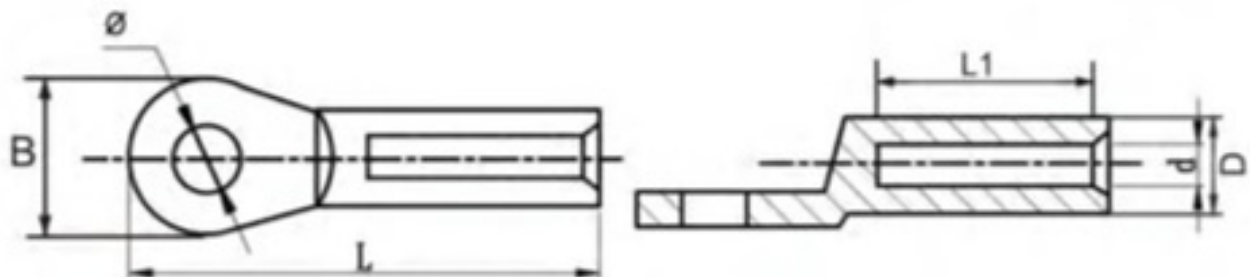
### ALUMINUM LUG



### PRODUCT OVERVIEW

Cable lugs are devices used for connecting cables to electrical appliances, other cables, surfaces, or mechanisms. Made from raw material with highest quality, there is three types of cable lugs, Aluminum, Copper and Bi-Metallic Lugs.

- Application: Used for transition connection of aluminium cable or aluminium alloy cable with aluminium end of electrical equipment in medium voltage.
- Material:  $Al \geq 99.5\%$
- Surface: Tin plated
- Feature: Oil blocking structure
- Clear markings on barrel to indicate correct crimping location, together with DIN standard crimping die.
- Prefilled with jointing compound.
- Standard: DIN 46329





## TECHNICAL PARAMETER

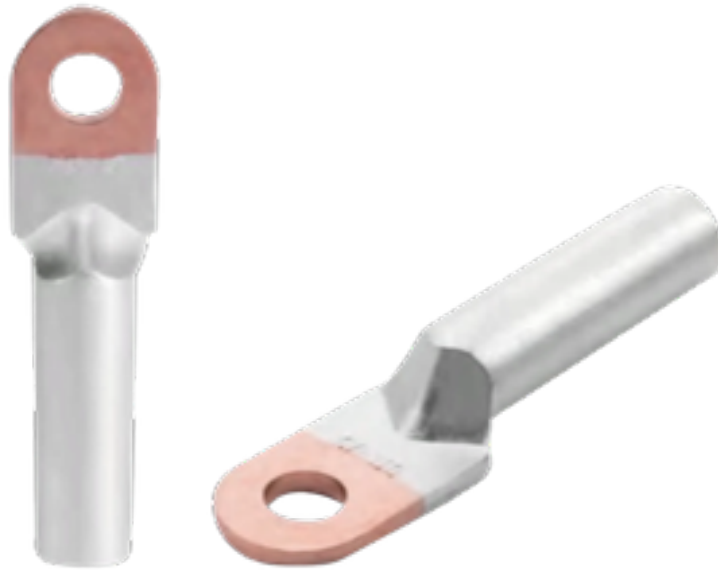
| Type     | Conductor Size (mm <sup>2</sup> ) | L  | d    | D    | B  | L1 | Stud Size |
|----------|-----------------------------------|----|------|------|----|----|-----------|
| AU25-8   | 25                                | 50 | 6.8  | 12   | 25 | 30 | M8        |
| AU25-10  |                                   | 50 | 6.8  | 12   | 25 | 30 | M10       |
| AU35-8   | 35                                | 62 | 8    | 14   | 25 | 42 | M8        |
| AU35-10  |                                   | 62 | 8    | 14   | 25 | 42 | M10       |
| AU50-10  | 50                                | 62 | 9.8  | 16   | 25 | 42 | M10       |
| AU50-12  |                                   | 62 | 9.8  | 16   | 25 | 42 | M12       |
| AU70-10  | 70                                | 72 | 11.2 | 18.5 | 25 | 52 | M10       |
| AU70-12  |                                   | 72 | 11.2 | 18.5 | 25 | 52 | M12       |
| AU95-8   | 95                                | 77 | 13.2 | 22   | 25 | 56 | M8        |
| AU95-10  |                                   | 77 | 13.2 | 22   | 25 | 56 | M10       |
| AU95-12  |                                   | 77 | 14.7 | 22   | 25 | 56 | M12       |
| AU120-10 | 120                               | 82 | 14.7 | 23   | 30 | 56 | M10       |
| AU120-12 |                                   | 82 | 14.7 | 23   | 30 | 56 | M12       |
| AU120-16 |                                   | 82 | 16.3 | 23   | 30 | 56 | M16       |
| AU150-10 | 150                               | 90 | 16.3 | 25   | 30 | 56 | M10       |
| AU150-12 |                                   | 90 | 16.3 | 25   | 30 | 60 | M10       |
| AU150-16 |                                   | 90 | 18.3 | 25   | 30 | 60 | M16       |



| Type     | Conductor Size<br>(mm <sup>2</sup> ) | L   | d    | D    | B  | L1 | Stud Size |
|----------|--------------------------------------|-----|------|------|----|----|-----------|
| AU185-12 | 185                                  | 91  | 18.3 | 28.5 | 30 | 60 | M12       |
| AU185-16 |                                      | 91  | 21   | 28.5 | 30 | 60 | M16       |
| AU240-12 | 240                                  | 103 | 21   | 32   | 38 | 70 | M12       |
| AU240-16 |                                      | 103 | 23.3 | 32   | 38 | 70 | M16       |
| AU300-12 | 300                                  | 103 | 23.3 | 34   | 38 | 70 | M12       |
| AU300-16 |                                      | 103 | 23.3 | 34   | 38 | 70 | M16       |
| AU400-12 | 400                                  | 116 | 26   | 38.5 | 38 | 73 | M12       |
| AU500-16 | 500                                  | 122 | 29   | 44   | 44 | 79 | M16       |



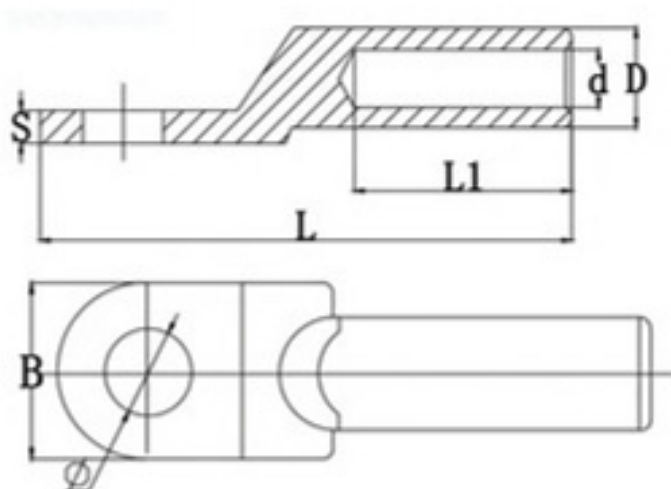
## BIMETALLIC LUG



## PRODUCT OVERVIEW

Cable lugs are devices used for connecting cables to electrical appliances, other cables, surfaces, or mechanisms. Made from raw material with highest quality, there is three types of cable lugs, Aluminum, Copper and Bi-Metallic Lugs.

- Application:Used for transition connection of aluminium cable or aluminium alloy cable with copper end of electrical equipment in low voltage.
- Material:Al $\geq$  99.5%, cu $\geq$  99.9%
- Feature:Oil blocking structure Friction welded





## TECHNICAL PARAMETER

| Item      | Dimensions |         |        |        |                |        |
|-----------|------------|---------|--------|--------|----------------|--------|
|           | L (mm)     | L1 (mm) | d (mm) | D (mm) | $\varphi$ (mm) | B (mm) |
| DTL-1-10  | 62         | 30      | 6.3    | 10     | 8.5            | 13     |
| DTL-1-16  | 64         | 30      | 6.5    | 10     | 8.5            | 14.5   |
| DTL-1-25  | 68         | 32      | 7.5    | 11     | 8.5            | 16     |
| DTL-1-35  | 73         | 33      | 8.7    | 12     | 10.5           | 18     |
| DTL-1-50  | 81         | 40      | 9.7    | 14     | 10.5           | 20     |
| DTL-1-70  | 92         | 41      | 11.5   | 16     | 12.5           | 23     |
| DTL-1-95  | 98         | 43      | 13.5   | 18     | 12.5           | 26     |
| DTL-1-120 | 104        | 45      | 15     | 20     | 14.5           | 28     |
| DTL-1-150 | 112        | 48      | 16.8   | 22     | 14.5           | 30     |
| DTL-1-185 | 118        | 50      | 18.7   | 24     | 17             | 33     |
| DTL-1-240 | 126        | 53      | 21     | 27     | 17             | 36     |
| DTL-1-300 | 143        | 62      | 23     | 30     | 21             | 45     |
| DTL-1-400 | 169        | 76      | 26     | 38     | 21             | 50     |
| DTL-1-500 | 179        | 82      | 29     | 40     | 21             | 55     |
| DTL-1-630 | 215        | 82      | 34.2   | 50     | 21             | 60     |



## TECHNICAL PARAMETER

| Item         | Dimensions(mm) |       |       |     |        |       |       |
|--------------|----------------|-------|-------|-----|--------|-------|-------|
|              | P±0.3          | D±0.5 | d±0.3 | L±3 | L1±0.3 | W±0.5 | S±0.3 |
| DTL-2-16-11  | φ11            | φ16   | φ6    | 80  | 40     | φ20   | 3     |
| DTL-2-25-11  | φ11            | φ16   | φ7    | 80  | 40     | φ20   | 3     |
| DTL-2-35-11  | φ11            | φ16   | φ8.5  | 80  | 40     | φ20   | 3     |
| DTL-2-50-13  | φ13            | φ20   | φ10   | 90  | 43     | φ25   | 4.5   |
| DTL-2-70-13  | φ13            | φ20   | φ11.5 | 90  | 43     | φ25   | 4.5   |
| DTL-2-95-13  | φ13            | φ20   | φ13.5 | 90  | 43     | φ25   | 4.5   |
| DTL-2-120-13 | φ13            | φ25   | φ15   | 115 | 59     | φ30   | 5.5   |
| DTL-2-150-13 | φ13            | φ25   | φ16.5 | 115 | 59     | φ30   | 5.5   |
| DTL-2-185-13 | φ13            | φ32   | φ18.5 | 122 | 60     | φ35   | 6     |
| DTL-2-240-13 | φ13            | φ32   | φ21   | 122 | 60     | φ35   | 6     |
| DTL-2-300-13 | φ13            | φ34   | φ23.5 | 128 | 65     | φ35   | 6     |
| DTL-2-400-17 | φ17            | φ40   | φ26   | 160 | 90     | φ36   | 6     |
| DTL-2-500-17 | φ17            | φ40   | φ30   | 160 | 95     | φ36   | 6     |
| DTL-2-630-17 | φ17            | φ47   | φ33   | 188 | 100    | φ45   | 10    |



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