



## LR2-D thermal relay

### Applications

This series of thermal relay can be used in the circuit of 50Hz or 60Hz, rated insulation voltage 660V, rated current 0.1-96A for protecting the phase break when the electric motor is overload.

The relay has different mechanism and temperature compensation & can be plugged in KLC1-D series AC contactor. It is the most advanced thermal relay in the nineties in the world.

### characteristics

a. Fundamental parameter of the main circuit

- (a). Rated insulation voltage 660V.
- (b). Rated working current 25,36,93A separately.
- (c). The regulator seal of rated setting current and setting.
- (d). Current of the Thermal component (see list 1)

b. Auxiliary Circuit

- (a). There is one pair of NO/ and N/C contact with electric insulation.
- (b). Rated insulation Voltage 500V.
- (c). Rated frequency 50-60Hz.
- (d). Use group, rated working voltage, appoint thermal current and rated current.



### specification

| Type    | Rated working current of thermal relay | Thermal component |                                     |           |
|---------|--|-------------------|-------------------------------------|-----------|
|         |  | Rated current (A) | Rated or scale of rated current (A) |           |
| LR2-D13 | 25                                     | LR2-D 1301        | 0.16                                | 0.10-0.16 |
|         |  | 1302              | 0.25                                | 0.16-0.25 |
|         |  | 1303              | 0.40                                | 0.25-0.40 |
|         |  | 1304              | 0.63                                | 0.40-6.3  |
|         |  | 1305              | 1.0                                 | 0.63-1.0  |
|         |  | 1306              | 1.6                                 | 1.0-1.6   |
|         |  | 13X6              | 2.0                                 | 1.25-2.0  |
|         |  | 1307              | 2.5                                 | 1.6-2.5   |
|         |  | 1308              | 4.0                                 | 2.5-4.0   |
|         |  | 1310              | 6.0                                 | 4.0-6.0   |
|         |  | 1312              | 8.0                                 | 5.5-8.0   |
|         |  | 1314              | 10.0                                | 7.0-10.0  |
|         |  | 1316              | 13.0                                | 9.0-13.0  |
| 1321    | 18.0                                   | 12.0-18.0         |                                     |           |
| 1322    | 25.0                                   | 17.0-25.0         |                                     |           |
| LR2-D23 | 36                                     | LR2-D 2353        | 32                                  | 23.0-32.0 |
|         |  | 2355              | 36                                  | 28.0-36.0 |
| LR2-D33 | 93                                     | LR2-D 3353        | 32                                  | 23.0-32.0 |
|         |  | 3355              | 40                                  | 30.0-40.0 |
|         |  | 3357              | 50                                  | 37.0-50.0 |
|         |  | 3359              | 65                                  | 48.0-65.0 |
|         |  | 3361              | 70                                  | 55.0-70.0 |
|         |  | 3363              | 80                                  | 63.0-80.0 |
|         |  | 3365              | 93                                  | 80.0-93.0 |





LRD-13



LRD-23



LRD-33

## LRD THERMAL RELAY

Differential thermal overload relays for using with fuse

Compensated relays with manual or automatic reset, with relay trip indicator, for AC or DC.

| Relay setting range |    |    |      | For using with contactor LC2- | Reference | Weight |
|---------------------|----|----|------|-------------------------------|-----------|--------|
|                     | aM | gG | BS88 |                               |           |        |
| A                   | A  | A  | A    |                               |           |        |

Class 10A(1) with connection by screw clamp terminals

|             |      |     |     |               |           |       |
|-------------|------|-----|-----|---------------|-----------|-------|
| 0.10...0.16 | 0.25 | 2   | -   | D09...D38     | LRD-01    | 0.124 |
| 0.16...0.25 | 0.5  | 2   | -   | D09...D38     | LRD-02    | 0.124 |
| 0.25...0.40 | 1    | 2   | -   | D09...D38     | LRD-03    | 0.124 |
| 0.40...0.63 | 1    | 2   | -   | D09...D38     | LRD-04    | 0.124 |
| 0.63...1    | 2    | 4   | -   | D09...D38     | LRD-05    | 0.124 |
| 1...1.7     | 2    | 4   | 6   | D09...D38     | LRD-06    | 0.124 |
| 1.6...2.5   | 4    | 6   | 10  | D09...D38     | LRD-07    | 0.124 |
| 2.5...4     | 6    | 10  | 16  | D09...D38     | LRD-08    | 0.124 |
| 4...6       | 8    | 16  | 16  | D09...D38     | LRD-10    | 0.124 |
| 5.5...8     | 12   | 20  | 20  | D09...D38     | LRD-12    | 0.124 |
| 7...10      | 12   | 20  | 20  | D09...D38     | LRD-14    | 0.124 |
| 9...13      | 16   | 25  | 25  | D12...D38     | LRD-16    | 0.124 |
| 12...18     | 20   | 35  | 32  | D18...D38     | LRD-21    | 0.124 |
| 16...24     | 25   | 50  | 50  | D25...D38     | LRD-22    | 0.124 |
| 23...32     | 40   | 63  | 63  | D25...D38     | LRD-32    | 0.124 |
| 30...38     | 50   | 80  | 80  | D32 and D38   | LRD-35    | 0.124 |
| 17...25     | 25   | 50  | 50  | D40...D95     | LRD-3322  | 0.510 |
| 23...32     | 40   | 63  | 63  | D40...D95     | LRD-3353  | 0.510 |
| 30...40     | 40   | 100 | 80  | D40...D95     | LRD-3355  | 0.510 |
| 37...50     | 63   | 100 | 100 | D40...D95     | LRD-3357  | 0.510 |
| 48...65     | 63   | 100 | 100 | D50...D95     | LRD-3359  | 0.510 |
| 55...70     | 80   | 125 | 125 | D50...D95     | LRD-3361  | 0.510 |
| 63...80     | 80   | 125 | 125 | D65 and D96   | LRD-3363  | 0.510 |
| 80...104    | 100  | 160 | 160 | D80 and D95   | LRD-3365  | 0.510 |
| 80...104    | 125  | 200 | 160 | D115 and D150 | LRD-4365  | 0.900 |
| 95...120    | 125  | 200 | 200 | D115 and D150 | LRD-4367  | 0.900 |
| 110...140   | 160  | 250 | 200 | D150          | LRD-4369  | 0.900 |
| 80...104    | 100  | 160 | 160 | (2)           | LRD-33656 | 1.000 |
| 95...120    | 125  | 200 | 200 | (2)           | LRD-33676 | 1.000 |
| 110...140   | 160  | 250 | 200 | (2)           | LRD-33696 | 1.000 |

Class 10A(1) with spring terminal connections (for direct mounting on the contactor only)

|             |      |    |    |           |         |       |
|-------------|------|----|----|-----------|---------|-------|
| 0.10...0.16 | 0.25 | 2  | -  | D09...D38 | LRD-013 | 0.140 |
| 0.16...0.25 | 0.5  | 2  | -  | D09...D38 | LRD-023 | 0.140 |
| 0.25...0.40 | 1    | 2  | -  | D09...D38 | LRD-033 | 0.140 |
| 0.40...0.63 | 1    | 2  | -  | D09...D38 | LRD-043 | 0.140 |
| 0.63...1    | 2    | 4  | -  | D09...D38 | LRD-053 | 0.140 |
| 1...1.6     | 2    | 4  | 6  | D09...D38 | LRD-063 | 0.140 |
| 1.6...2.5   | 4    | 6  | 10 | D09...D38 | LRD-073 | 0.140 |
| 2.5...4     | 6    | 10 | 16 | D09...D38 | LRD-083 | 0.140 |
| 4...6       | 8    | 16 | 16 | D09...D38 | LRD-103 | 0.140 |
| 5.5...8     | 12   | 20 | 20 | D09...D38 | LRD-123 | 0.140 |
| 7...10      | 12   | 20 | 20 | D09...D38 | LRD-143 | 0.140 |
| 9...13      | 16   | 25 | 25 | D12...D38 | LRD-163 | 0.140 |
| 12...18     | 20   | 32 | 32 | D18...D38 | LRD-213 | 0.140 |
| 16...24     | 25   | 50 | 50 | D25...D38 | LRD-223 | 0.140 |

Thermal overload relays for using with unbalanced loads

Class 10A(1) with connection by screw clamp terminals

Change the prefix in the references above from LRD (except LRD-4...) to LR3-D.

Example: LRD-01 becomes LR3-D01.

Thermal overload relays for using on 1000V supplies

Class 10A(1) with connection by screw clamp terminals

(1) Standard IEC947-1 specifies a tripping time for 7.2 times the setting current  $I_R$ : class 10A: between 2 and 10 seconds.

(2) Independent mounting.



LR1-D09301



LR1-D 25322



LR1-D09305

## LR1-D THERMAL RELAY

### Applications

LR1-D series thermal relay is suitable for thermal protection in the circuit with AC 50 or 60Hz, voltage up to 660V, motor power up to 45KW or less. It has different attachment and temperature compensating function. It can be fixed onto contactor and can also be fixed independently.

The product is made in accordance with IEC292-1 LR1-D series thermal relay and has kinds of species, 9A, 12A, 16A, 25A, 40A, 63A, 80A.

### specification

| Type        | Adjusting range of current (A) | Control power (AC)(KW) |           |       |           |         | Plug-in contactor |
|-------------|--------------------------------|------------------------|-----------|-------|-----------|---------|-------------------|
|             |                                | 220V                   | 380V      | 415V  | 440V      | 660V    |                   |
| LR1-D 09301 | 0.1~0.16                       |                        |           |       |           |         | LC1-D09-25        |
| LR1-D 09302 | 0.16~0.25                      |                        |           |       |           |         | LC1-D09-25        |
| LR1-D 09303 | 0.25~0.40                      |                        |           |       |           |         | LC1-D09-25        |
| LR1-D 09304 | 0.40~0.63                      |                        |           |       |           | 0.37    | LC1-D09-25        |
| LR1-D 09305 | 0.63~1                         |                        |           |       |           | 0.55    | LC1-D09-25        |
| LR1-D 09306 | 1~1.6                          |                        | 0.37      |       | 0.55      | 0.7~1.1 | LC1-D09-25        |
| LR1-D 09307 | 1.6~2.5                        | 0.37                   | 0.55~0.75 | 1.1   | 0.55~0.75 | 1.5     | LC1-D09-25        |
| LR1-D 09308 | 2.5~4                          | 0.55~0.75              | 1.1~1.5   | 1.5   | 1.5       | 2.2~3   | LC1-D09-25        |
| LR1-D 09310 | 4~6                            | 1.1                    | 2.2       | 2.2   | 2.2       | 4       | LC1-D09-25        |
| LR1-D 09312 | 5.5~8                          | 1.5                    | 3         | 3     | 3         | 5.5     | LC1-D09-25        |
| LR1-D 09314 | 7~10                           | 2.2                    | 4         | 4     | 4         | 7.5     | LC1-D09-25        |
| LR1-D 09316 | 10~13                          | 3                      | 5.5       | 5.5   | 5.5       | 10      | LC1-D09-25        |
| LR1-D 16321 | 13~18                          | 4                      | 7.5       | 9     | 9         | 15      | LC1-D09-25        |
| LR1-D 25322 | 19~25                          | 5.5                    | 11        | 11    | 1         | 18.5    | LC1-D09-25        |
| LR1-D 40353 | 23~32                          | 7.5                    | 15        | 15    | 15        | 22      | LC1-D40 50 60     |
| LR1-D 40355 | 30~40                          | 10                     | 18.5      | 22    | 2         | 30      | LC1-D40 50 60     |
| LR1-D 63357 | 38~50                          | 11                     | 22        | 25    | 25        | 37      | LC1-D40 50 60     |
| LR1-D 63359 | 48~57                          | 15                     | 25        | 30    | 30        | 45      | LC1-D40 50 60     |
| LR1-D 63361 | 57~66                          | 18.5                   | 30        | 37    | 37        | 55      | LC1-D40 50 60     |
| LR1-D 80363 | 63~80                          | 22                     | 33~37     | 33~37 | 33~37     | 59~63   | LC1-D80           |



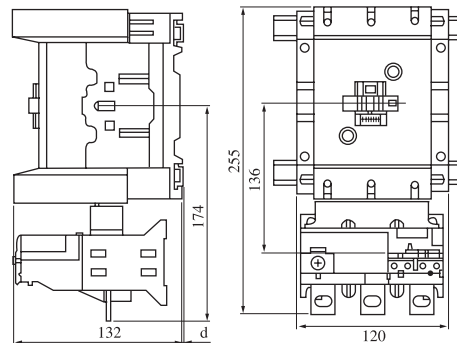
## LR2-F Electronic Thermal Overload

### Specifications

| Type    | Number | Setting range | For contactor |
|---------|--------|---------------|---------------|
| LR2-F53 | F5357  | 30-50         | F115-F185     |
|         | F5363  | 48-80         | F115-F185     |
|         | F5367  | 60-100        | F115-F185     |
|         | F5369  | 90-150        | F115-F185     |
|         | F5371  | 132-220       | F225-F265     |
| LR2-F73 | F7375  | 200-330       | F330-F500     |
|         | F7379  | 300-500       | F330-F500     |
|         | F7381  | 380-630       | F400-F630     |



### Dimensions



## TH-K Thermal Relay

### Application

The thermal overload relays are suitable for overload protection of AC motor operated on 8-hours duty or uninterrupted duty.

The overload protected AC motor with frequency 50Hz ,voltage up to 660V ,current up to 40A.

Several functions provided by these relays are phase - failure protection, temperature compensation, ON/OFF indication and manual/automatic reset. The relays comply with IEC292-1 standard.

### Specifications

| Type   | Plug in AC contact         | Rated current of Thermal element (A)     | Setting current range(A)   |
|--------|----------------------------|--|--|
| TH-K12 | S-K10, S-K11               | 0,24,0,35,0,5,0,7,0,9,1,3                | 0.2-028,0.28-.042,0.4-0.6,0.55-0.85,0.7-1.1,1-1.6,1.4-2,1.7-2.1,2-3.2<br>8-4.4,4-6,5.2-8,7-11,9-13 |
|        | S-K12,S-K18                | 1.7,2.1,2.5,3.6,5.6,6.9,11               |  |
| TH-K20 | S-K20,S-K21                | 2.1,2.5,3.6,5.6,6.9<br>11,15,19,22,29,35 | 1.7-2.1,2-3,2.8-4.4,4-6,5.2-8,7-11,9-13,12-18,16-22,18-26,24-34,30-40                              |
|        | S-K25,S-K35                |  |  |
| TH-K60 | S-K50,S-K65<br>S-K80,S-K95 | 42,54                                    | 34-50,43-65  |





## 3UA Thermal Overload Relay

### Application

3UA series thermal overload relay is suitable for using in power system with AC 50/60Hz, rated operation voltage up to 660V and 1000V, current from 0.1A to 630A. It is used to protect AC three-phase asynchronous motor against overload and open-phase. The current setting value can be regulated and the setting current values of many thermal elements are intercrossing overlapping arrangement, for easy selecting by the customers from -25°C to +55°C air temperature as the products have temperature compensating. The relays have the test push-button for breaking NC contacts, the operating indication and free trip characteristics. The items conform to IEC60947-5.



### Specifications

| Type  | Rated operating current (A) | Rated insulation voltage (V) | Current setting range (A)  |
|-------|-----------------------------|------------------------------|--|
| 3UA50 | 12.5                        | 660                          | 0.1~0.16, 0.16~0.25, 0.25~0.4, 0.32~0.63, 0.63~1.0, 0.8~1.25, 1.0~1.6, 1.25~2.0, 1.6~2.5, 2.0~3.2, 2.5~4.0, 3.2~5.0, 4.0~6.3, 5.0~8.0, 6.3~10.0, 8.0~12.5  |
| 3UA52 | 25                          | 660                          | 0.1~0.16, 0.16~0.25, 0.25~0.4, 0.4~0.63, 0.63~1.0, 0.8~1.25, 1.0~1.6, 1.25~2.0, 1.6~2.5, 2.0~3.2, 2.5~4.0, 3.2~5.0, 4.0~6.3, 5.0~8.0, 6.3~10.0, 8.0~12.5, 10.0~16.0, 12.5~20.0, 16.0~25.0  |
| 3UA54 | 32                          | 660                          | 4.0~6.3, 6.3~10.0, 10.0~16.0, 12.5~20.0, 16.0~25.0, 20.0~32.0, 25.0~36.0   |
| 3UA58 | 80                          | 1000                         | 16.0~25.0, 20.0~32.0, 25.0~40.0, 32.0~50.0, 40.0~57.0, 50.0~63.0, 57.0~70.0, 63.0~80.0   |
| 3UA59 | 63                          | 660                          | 0.1~0.16, 0.16~0.25, 0.25~0.4, 0.4~0.63, 0.63~1.0, 0.8~1.25, 1.0~1.6, 1.25~2.0, 1.6~2.5, 2.0~3.2, 2.5~4.0, 3.2~5.0, 4.0~6.3, 5.0~8.0, 6.3~10.0, 8.0~12.5, 10.0~16.0, 12.5~20.0, 16.0~25.0, 20.0~32.0, 25.0~40.0, 32.0~45.0, 40.0~57.0, 50.0~63.0 |
| 3UA62 | 180                         | 660                          | 55.0~80.0, 63.0~90.0, 80.0~110.0, 90.0~120.0, 110.0~135.0, 120.0~150.0, 135.0~160.0, 150.0~180.0   |
| 3UA66 | 400                         | 1000                         | 80.0~125.0, 125.0~200.0, 180.0~250.0, 200.0~320.0, 250.0~400.0   |
| 3UA68 | 630                         | 1000                         | 320.0~500.0, 400.0~630.0   |







## DTH Series Thermal Overload Relay

### Application

The thermal overload relay protect the motors Overload, Locking, Open phase (differential)

### Characteristics

- Direct mounting structure

The TOR is mounting directly to the Magnetic Contactors without addition brackets, (Applied model: GTH-22,40,85)

- Safety cover

The finger proof safety cover prevent careless touch of electric conductor (Applied model: GTH-22,40,85)

- Separation of power part and operation part

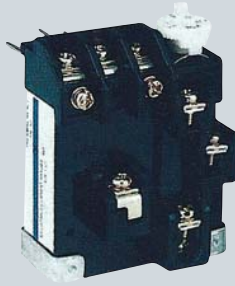
The main circuit and the operation part are separately designed and the operation part is commonly used in GTH-22,40,85

- Easy operation

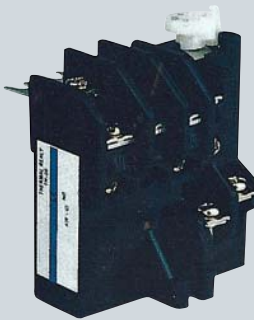
### Types and ratings

| Ratings                  | Type            | DTH-22   |      |              | DTH-40   |      |                 | DTH-85   |      |      |
|--------------------------|-----------------|----------|------|--------------|----------|------|-----------------|----------|------|------|
|                          | Nominal current | Ranges   |      |              | Ranges   |      |                 | Ranges   |      |      |
|                          |                 | Min.     | Mid. | Max.         | Min.     | Mid. | Max.            | Min.     | Mid. | Max. |
| Rated current<br>(A)     | 0.14            | 0.1      | 0.14 | 0.16         |          |      |                 |          |      |      |
|                          | 0.21            | 0.16     | 0.21 | 0.25         |          |      |                 |          |      |      |
|                          | 0.33            | 0.25     | 0.33 | 0.4          |          |      |                 |          |      |      |
|                          | 0.52            | 0.4      | 0.52 | 0.63         |          |      |                 |          |      |      |
|                          | 0.82            | 0.63     | 0.82 | 1            |          |      |                 |          |      |      |
|                          | 1.3             | 1        | 1.3  | 1.6          |          |      |                 |          |      |      |
|                          | 2.1             | 1.6      | 2.1  | 2.5          |          |      |                 |          |      |      |
|                          | 3.3             | 2.5      | 3.3  | 4            |          |      |                 |          |      |      |
|                          | 5               | 4        | 5    | 6            | 4        | 5    | 6               |          |      |      |
|                          | 6.5             | 5        | 6.5  | 8            | 5        | 6.5  | 8               |          |      |      |
|                          | 7.5             | 6        | 7.5  | 9            | 6        | 7.5  | 9               |          |      |      |
|                          | 8.5             | 7        | 8.5  | 10           | 7        | 8.5  | 10              | 7        | 8.5  | 10   |
|                          | 11              | 9        | 11   | 13           | 9        | 11   | 13              | 9        | 11   | 13   |
|                          | 15              | 12       | 15   | 18           | 12       | 15   | 18              | 12       | 15   | 18   |
|                          | 19              | 16       | 19   | 22           | 16       | 19   | 22              | 16       | 19   | 22   |
|                          | 22              |          |      |              | 18       | 22   | 26              | 18       | 22   | 26   |
|                          | 30              |          |      |              | 24       | 30   | 36              | 24       | 30   | 36   |
| 34                       |                 |          |      | 28           | 34       | 40   | 28              | 34       | 40   |      |
| 42                       |                 |          |      |              |          |      | 34              | 42       | 50   |      |
| 55                       |                 |          |      |              |          |      | 45              | 55       | 65   |      |
| 65                       |                 |          |      |              |          |      | 54              | 65       | 75   |      |
| 74                       |                 |          |      |              |          |      | 63              | 74       | 85   |      |
| Element No.              | 2heaters        | standard |      |              | standard |      |                 | standard |      |      |
|                          | 3heaters        | option   |      |              | option   |      |                 | option   |      |      |
| Aux.contact              | 1 NO 1NC        |          |      | 1 NO 1NC     |          |      | 1 NO 1NC        |          |      |      |
| Reset type               | Auto/Manual     |          |      | Auto/Manual  |          |      | Auto/Manual     |          |      |      |
| Power consumption        | 1.8VA/heater    |          |      | 2.0VA/heater |          |      | 3.5VA/heater    |          |      |      |
| Dimension(mm)(W x H x D) | 44 × 68 × 90    |          |      | 53 × 67 × 90 |          |      | 70 × 73 × 103   |          |      |      |
| Separate mounting unit   | AZ-22H          |          |      | AZ-40H       |          |      | AZ-85H          |          |      |      |
| Other model              | 3heaters        | GTH-22/3 |      |              | GTH-40/3 |      |                 | GTH-85/3 |      |      |
|                          | Differential    | GTK-22   |      |              | GTK-40   |      |                 | GTK-85   |      |      |
|                          | Delay open      | GTH-22/L |      |              | GTH-40/L |      |                 | GTH-85/L |      |      |
| Applied contactors       | GMC-9,12,18,22  |          |      | GMC-32,40    |          |      | GMC-50,65,75,85 |          |      |      |
| Applied switches         | GMS-9,12,18,22  |          |      | GMS-32,40    |          |      | GMS-50,65,75,85 |          |      |      |





TR - 12



TR - 20

## TR Series Thermal Relay

### Application

TR series thermal relay can be used in the circuits of 50Hz or 60Hz ,rated working voltage 500V,rated working current 0.19~40A for protecting the phase break when the electric motor is overload.

### Specifications

| Type   | TR-0N          |            | TR-12           |            | TR5-1N         |            | TR-20           |            |       |            |       |            |
|--|----------------|------------|-----------------|------------|----------------|------------|-----------------|------------|-------|------------|-------|------------|
| Pole   | 2P/3P          |            |                 |            |                |            |                 |            |       |            |       |            |
| Type of auxiarycontact   | 1NO+1NC<br>lab |            | 2N/C<br>lab(lc) |            | 1NO+1NC<br>lab |            | 2N/C<br>lab(lc) |            |       |            |       |            |
|  | Range          | Set<br>(A) | Range           | Set<br>(A) | Range          | Set<br>(A) | Range           | Set<br>(A) | Range | Set<br>(A) | Range | Set<br>(A) |
| Rated<br>current<br>range & set<br>(A)                               | 0.1~0.15       | 0.1        | 0.19~0.31       | 0.25       | 0.1~0.15       | 0.1        | 0.19~0.31       | 0.25       | 22~34 | 28         | 22~34 | 28         |
|  | 0.13~0.2       | 0.13       | 0.3~0.5         | 0.4        | 0.13~0.2       | 0.13       | 0.3~0.5         | 0.4        | 28~38 | 33         | 28~38 | 33         |
|  | 0.15~0.24      | 0.15       | 0.45~0.75       | 0.6        | 0.15~0.24      | 0.15       | 0.45~0.75       | 0.6        | 32~48 | 40         |       |            |
|  | 0.2~0.3        | 0.2        | 0.7~1.1         | 0.9        | 0.2~0.3        | 0.2        | 0.7~1.1         | 0.9        |       |            |       |            |
|  | 0.24~0.36      | 0.24       | 0.9~1.5         | 1.2        | 0.24~0.36      | 0.24       | 0.9~1.5         | 1.2        |       |            |       |            |
|  | 0.3~0.45       | 0.3        | 1.3~2.1         | 1.7        | 0.3~0.45       | 0.3        | 1.3~2.1         | 1.7        |       |            |       |            |
|  | 0.36~0.54      | 0.36       | 1.6~2.6         | 2.1        | 0.36~0.45      | 0.36       | 1.6~2.6         | 2.1        |       |            |       |            |
|  | 0.48~0.72      | 0.48       | 2.5~4.1         | 3.3        | 0.48~0.72      | 0.48       | 2.5~4.1         | 3.3        |       |            |       |            |
|  | 0.64~0.96      | 0.64       | 3.4~5.4         | 4.4        | 0.64~0.96      | 0.64       | 3.4~5.4         | 4.4        |       |            |       |            |
|  | 0.8~1.2        | 0.8        | 5~8             | 6.5        | 0.8~1.2        | 0.8        | 5~8             | 6.5        |       |            |       |            |
|  | 0.95~1.45      | 0.95       | 7~11            | 9          | 0.95~1.45      | 0.95       | 7~11            | 9          |       |            |       |            |
|  | 1.4~2.2        | 1.4        | 9~13            | 11         | 1.4~2.2        | 1.4        | 9~13            | 11         |       |            |       |            |
|  | 1.7~2.6        | 1.7        | 12~18           | 15         | 1.7~2.6        | 1.7        | 12~18           | 15         |       |            |       |            |
|  | 2.2~3.4        | 2.2        |                 |            | 2.2~3.4        | 2.2        | 17~24           | 21         |       |            |       |            |
|  | 2.8~4.2        | 2.8        |                 |            | 2.8~4.2        | 2.8        |                 |            |       |            |       |            |
|  | 4~6            | 4          |                 |            | 4~6            | 4          |                 |            |       |            |       |            |
| 5~8  | 5              |            |                 | 5~8        | 5              |            |                 |            |       |            |       |            |
| 6~9  | 6              |            |                 | 6~9        | 6              |            |                 |            |       |            |       |            |
| 7~11   | 7              |            |                 | 7~11       | 7              |            |                 |            |       |            |       |            |
| 9~13   | 9              |            |                 | 9~13       | 9              |            |                 |            |       |            |       |            |
|  |                |            |                 | 12~18      | 12             |            |                 |            |       |            |       |            |
| mm<br>External<br>dimension<br>L × W × H<br>Amax ×<br>Bmax ×<br>Cmax | 60 × 45 × 81   |            | 55 × 52 × 72    |            | 63 × 54 × 81   |            | 62 × 65 × 83    |            |       |            |       |            |