

# Contactors Accessories

## For Series K3 & KG3 Series Contactors

**Auxiliary Contact Blocks** for contactors K(G)3-07.. to K3-115.., type HN.. for low level switching <sup>1)</sup>



| Rated Operational Current |                   |                  | Contacts |    |    |    | Type  | Pack pcs. | Weight kg/pc. |
|---------------------------|-------------------|------------------|----------|----|----|----|-------|-----------|---------------|
| AC15<br>230V<br>A         | AC15<br>400V<br>A | AC1<br>690V<br>A | NO       | NC | EM | LB |       |           |               |
| 3                         | 2                 | 10               | 1        | -  | -  | -  | HN10  | 10        | 0,02          |
| 3                         | 2                 | 10               | -        | 1  | -  | -  | HN01  | 10        | 0,02          |
| 3                         | 2                 | 10               | -        | -  | 1  | -  | HN10U | 10        | 0,02          |
| 3                         | 2                 | 10               | -        | -  | -  | 1  | HN01U | 10        | 0,02          |
| 6                         | 3                 | 25               | 1        | -  | -  | -  | HA10  | 10        | 0,03          |
| 6                         | 3                 | 25               | -        | 1  | -  | -  | HA01  | 10        | 0,03          |

**Auxiliary Contact Blocks** for contactors K3-.., for low level switching <sup>1)</sup>



| Rated Operational Current |                   |                  | Contacts                                                     |    | Type | Pack pcs. | Weight kg/pc. |      |
|---------------------------|-------------------|------------------|--------------------------------------------------------------|----|------|-----------|---------------|------|
| AC15<br>230V<br>A         | AC15<br>400V<br>A | AC1<br>690V<br>A | mounting:<br>1 HB.. on left side<br>and 1 HB.. on right side | NO | NC   |           |               |      |
| 3                         | 2                 | 10               | for K3-10 to K3-22                                           | 1  | 1    | HB11-1    | 10            | 0,02 |
| 3                         | 2                 | 10               | for K3-24 to K3-115                                          | 1  | 1    | HB11      | 10            | 0,02 |
| 3                         | 2                 | 10               | for K3-24 to K3-115                                          | -  | 2    | HB02      | 10            | 0,02 |

**Auxiliary Contact Blocks** for contactors K3-116.. to K3-1200.., for low level switching <sup>1)</sup>



| Rated Operational Current |                   |                  | Contacts                       |                 | Type | Pack pcs. | Weight kg/pc. |      |
|---------------------------|-------------------|------------------|--------------------------------|-----------------|------|-----------|---------------|------|
| AC15<br>230V<br>A         | AC15<br>400V<br>A | AC1<br>690V<br>A | For contactors                 | NO              | NC   |           |               |      |
| 3                         | 2                 | 10               | K3-116 to K3-316 top           | 1               | 1    | HKT11     | 1             | 0,04 |
| 3                         | 2                 | 10               | K3-116 to K3-316 top           | 2               | 2    | HKT22     | 1             | 0,05 |
| 3                         | 2                 | 10               | K3-116 to K3-316 outside       | 1               | 1    | HKA11     | 1             | 0,05 |
| 6                         | 3                 | 16               | K3-200 to K3-860 <sup>2)</sup> | 2 <sup>2)</sup> | 2    | HKF22     | 1             | 0,12 |
| 6                         | 3                 | 16               | K3-1000, K3-1200 inside        | 1               | 1    | HKB11     | 1             | 0,17 |

**Snap-on Momentary Contacts** for K(G)3-07.. to K3-115.. for low level switching<sup>1)</sup>



| Rated Operational Current |                   |                  | Contacts        |    | Type | Pack pcs. | Weight kg/pc. |      |
|---------------------------|-------------------|------------------|-----------------|----|------|-----------|---------------|------|
| AC15<br>230V<br>A         | AC15<br>400V<br>A | AC1<br>690V<br>A | Specification   | NO | NC   |           |               |      |
| 3                         | 2                 | 10               | manual operated | 1  | -    | HTN10     | 10            | 0,02 |
| 3                         | 2                 | 10               | manual operated | -  | 1    | HTN01     | 10            | 0,02 |

**Terminal Blocks** for contactors K(G)3-07.. to K3-115.. and K2-..



| Specification              | Thermal Current I <sub>th</sub><br>A | Type  | Pack pcs. | Weight kg/pc. |
|----------------------------|--------------------------------------|-------|-----------|---------------|
| 2 terminals interconnected | 26                                   | K2-DK | 10        | 0,02          |
| 2 terminals insulated      | 26                                   | K2-SK | 10        | 0,02          |

1) Contacts suitable for electronic circuits, according to IEC60947-5-4 for rated voltage 24V DC (test ratings 17V DC, 5mA) Mirror contacts acc. IEC60947-4-1 Annex F. Technical data see page 80

# Contactors Accessories

## For Series K3 & KG3 Series Contactors

### Electronic Timer

for mounting on DIN-rail, Control voltage 24-240V AC/DC, 1 changeover contact  
 OFF-delay without auxiliary voltage  
 Replace Pneumatic Timer K2-TP.. and K2-TA



| 5 Functions in one device                                                                                                   | 4 Time ranges in one device                  | Rated Current AC1 250V A | Type               | Pack pcs. | Weight kg/pc. |
|-----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|--------------------------|--------------------|-----------|---------------|
| ON-delay,<br>OFF-delay,<br>Single shot trailing edge,<br>Single shot leading edge,<br>Single shot leading and trailing edge | 0,1 - 1,<br>1 - 10,<br>6 - 60 a.<br>18 - 180 | 5                        | <b>K3-T180 240</b> | 1         | 0,085         |

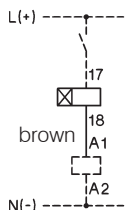
### Electronic Timer On-delay for contactors K(G)3-07.. to K3-115.. and K2-..

Timer will be connected with the contactor coil, can be snapped onto the contactor and occupies 2 add-on spaces. Contactor switches On-delay.

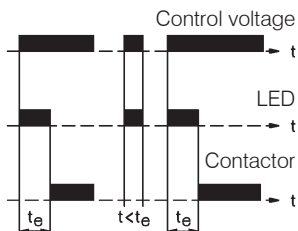


| Operational Voltage V | Time Range s | Rated Current AC15 A | Type                | Pack pcs. | Weight kg/pc. |
|-----------------------|--------------|----------------------|---------------------|-----------|---------------|
| 24 - 60V AC/DC        | 1 - 30       | 0,75                 | <b>K2-TE30 60</b>   | 1         | 0,08          |
| 100 - 250V AC/DC      | 1 - 30       | 0,75                 | <b>K2-TE30 250</b>  | 1         | 0,08          |
| 24 - 60V AC/DC        | 10 - 180     | 0,75                 | <b>K2-TE180 60</b>  | 1         | 0,08          |
| 100 - 250V AC/DC      | 10 - 180     | 0,75                 | <b>K2-TE180 250</b> | 1         | 0,08          |
| 24 - 60V AC/DC        | 30 - 600     | 0,75                 | <b>K2-TE600 60</b>  | 1         | 0,08          |
| 100 - 250V AC/DC      | 30 - 600     | 0,75                 | <b>K2-TE600 250</b> | 1         | 0,08          |

#### Wiring Diagram



#### Timing Chart



#### Operation Range

Time repeat accuracy  
 Recovery time (typical)

0,8 - 1,1 x U<sub>s</sub>  
 ≤1%  
 50ms

**Voltage Drop** after the time delay t<sub>e</sub>  
 (Control voltage 24V: use contactor with 20V-coil)  
 Max. inrush current (peak value)

<3V  
 25A <10ms

#### Duty Cycle

Ambient temperature  
 Short circuit protection

100%  
 -40° - +60°C  
 2A

### Fuse Holders for contactors K(G)3-07.. to K3-115.. and K2-..



| Specifications                                                     | Rated Voltage | Type        | Pack pcs. | Weight kg/pc. |
|--------------------------------------------------------------------|---------------|-------------|-----------|---------------|
| Fuse holder for fuse 5x20mm (max. 6,3A)<br>Fuses are not included. | 250V AC       | <b>K2-F</b> | 1         | 0,02          |

### Rectifier with Fuse Holder for contactors K(G)3-07.. to K3-115.. and K2-..

| Specifications             | Rated Voltage | Type          | Pack pcs. | Weight kg/pc. |
|----------------------------|---------------|---------------|-----------|---------------|
| with built-in rectifier 1A | 250V AC       | <b>K2-RF1</b> | 1         | 0,03          |
| with built-in rectifier 3A | 250V AC       | <b>K2-RF3</b> | 1         | 0,03          |

# Contactors Accessories

## For Series K3 & KG3 Series Contactors

**Latch** for contactors K(G)3-07.. to K3-74.. and K2-..

with NC aux. contact  
duty cycle 10%, max. 30 sec. AC / max. 20 sec. DC  
power consumption max. 35VA



For Contactors

K3-07 to K3-22, K2-07 to K2-16

K3-24 to K3-40, K2-23 to K2-37, KG3-10 to KG3-40

K3-50 to K3-74, K2-45 to K2-60

Technical data see page 74

**Latch / Magnetic latch for Contactors K3-151 to K3-1200 on request**

| Type                | Coil voltage      | Pack pcs. | Weight kg/pc. |
|---------------------|-------------------|-----------|---------------|
| <b>24</b>           | 22-26V 50/60Hz    |           |               |
| <b>110</b>          | 100-120V 50/60Hz  |           |               |
| <b>230</b>          | 210 -250V 50/60Hz |           |               |
| <b>400</b>          | 360-440V 50/60Hz  |           |               |
| ↓                   |                   |           |               |
| <b>K2-L22 . . .</b> |                   | 1         | 0,08          |
| <b>K2-L40 . . .</b> |                   | 1         | 0,08          |
| <b>K2-L74 . . .</b> |                   | 1         | 0,08          |

**Indicator Units** for contactors K(G)3-07.. to K3-115.. and K2-..



| Specifications                                                                                                                 | Voltage Range    | Type          | Pack pcs. | Weight kg/pc. |
|--------------------------------------------------------------------------------------------------------------------------------|------------------|---------------|-----------|---------------|
| <b>Coil Current Indicator</b> , green (LED)                                                                                    | 24 - 660V AC/DC  | <b>K2-ING</b> | 10        | 0,02          |
| <b>Coil Current Indicator</b> , red (LED)                                                                                      | 24 - 660V AC/DC  | <b>K2-INR</b> | 10        | 0,02          |
| To connect in series with the contactor coil. In case of coil interruption the indication goes out. Voltage drop appr. 2 volts |                  |               |           |               |
| <b>Voltage Indicator</b> , clear (glow-disc. I.)                                                                               | 220 - 415V AC/DC | <b>K2-UN</b>  | 10        | 0,02          |
| <b>Voltage Indicator</b> , red (LED)                                                                                           | 24 - 120V AC/DC  | <b>K2-UNR</b> | 10        | 0,02          |
| To connect parallel to the contactor coil. In case of applied voltage the indication also lights at coil interruption.         |                  |               |           |               |

## Snap-On Adapter



| For Type                                                           | Specification                                                          | Type         | Pack pcs. | Weight kg/pc. |
|--------------------------------------------------------------------|------------------------------------------------------------------------|--------------|-----------|---------------|
| K2-DK, K2-SK, K2-TE, K2-TA<br>K2-IM, K2-F, K2-RF<br>K2-IN., K2-UN. | for snap-on mounting of accessories on 35mm DIN-rail acc. DIN EN 50022 | <b>K2-SM</b> | 10        | 0,009         |

## Reversing Starter Connector




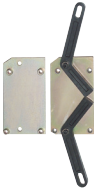
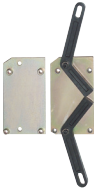


| For Reversing Starter Types | Type             | Pack pcs. | Weight kg/pc. |
|-----------------------------|------------------|-----------|---------------|
| K3NWU10, K3NWU18            | <b>K3NW-VB10</b> | 1         |               |
| K3WU24, K3WU32              | <b>K3W-VB24</b>  | 1         | 0,025         |


# Contactor Accessories

## For Series K3 & KG3 Series Contactors


### Mechanical Interlocks

|                                                                                   | Interlocks contactor with<br>Type | contactor<br>Type | Mounting        | Type                         | Pack<br>pcs. | Weight<br>kg/pc. |
|-----------------------------------------------------------------------------------|-----------------------------------|-------------------|-----------------|------------------------------|--------------|------------------|
|  | K3-07 to K3-40                    | K3-07 to K3-40    | horizontal      | <b>LG10889</b> <sup>1)</sup> | 10           | 0,006            |
|                                                                                   | KG3-07 to KG3-22                  | KG3-07 to KG3-22  |                 |                              |              |                  |
|                                                                                   | KG3-24 to KG3-40                  | KG3-24 to KG3-40  |                 |                              |              |                  |
|                                                                                   | K2-07 to K2-37                    | K2-07 to K2-37    |                 |                              |              |                  |
|  | K3-24 to K3-74                    | K3-50 to K3-74    | horizontal      | <b>LG10890</b> <sup>1)</sup> | 1            | 0,010            |
|                                                                                   | K2-23 to K2-60                    | K2-45 to K2-60    |                 |                              |              |                  |
|  | K3-90, K3-115                     | K3-90, K3-115     | horizontal      | <b>LG11478</b> <sup>1)</sup> | 1            | 0,010            |
|                                                                                   | K65 to K110                       | K65 to K110       | horizontal      | <b>LG8511</b>                | 1            | 0,076            |
|  | K3-116 to K3-316                  | K3-116 to K3-316  | horizontal      | <b>LG11223H</b>              | 1            | 0,06             |
|                                                                                   | K3-315 to K3-550                  | K3-315 to K3-550  | horizontal      | <b>LG10400H</b>              | 1            | 0,8              |
| K3-315 to K3-550                                                                  | K3-315 to K3-550                  | vertical          | <b>LG10400V</b> | 1                            |              |                  |
| K3-450, K3-550                                                                    | K3-700, K3-860                    | horizontal        | <b>LG10399H</b> | 1                            |              |                  |
| K3-450, K3-550                                                                    | K3-700, K3-860                    | vertical          | <b>LG10399V</b> | 1                            |              |                  |
|  | K3-700, K3-860                    | K3-700, K3-860    | horizontal      | <b>LG10402H</b>              | 1            | 1,5              |
|                                                                                   | K3-700, K3-860                    | K3-700, K3-860    | vertical        | <b>LG10402V</b>              | 1            | 0,9              |
|                                                                                   | K3-700, K3-860                    | K3-1000, K3-1200  | horizontal      | <b>LG10401H</b>              | 1            | 1,9              |
|                                                                                   | K3-700, K3-860                    | K3-1000, K3-1200  | vertical        | <b>LG10401V</b>              | 1            | 1,6              |
| 1) clamps for mounting inc                                                        | K3-1000, K3-1200                  | K3-1000, K3-1200  | horizontal      | <b>LG10403H</b>              | 1            | 1,8              |
|                                                                                   | K3-1000, K3-1200                  | K3-1000, K3-1200  | vertical        | <b>LG10403V</b>              | 1            | 1,5              |

### Terminal Covers for terminal protection according to DIN 57106, VBG 4

|                                                                                     | For Contactors           | Specification   | Type            | Pack<br>pcs. | Weight<br>kg/pc. |
|-------------------------------------------------------------------------------------|--------------------------|-----------------|-----------------|--------------|------------------|
|  | K65 to K110 (spare part) | for 6 terminals | <b>LG9333</b>   | 1            | 0,045            |
|                                                                                     | K3-151, K3-176           | 3-pole          | <b>LG10404</b>  | 1            | 0,12             |
|                                                                                     | K3-116 to K3-176         | 4-pole          | <b>LG104044</b> | 1            | 0,14             |
|                                                                                     | K3-210, K3-260, K3-316   | for 3 terminals | <b>LG11457</b>  | 1            | 0,14             |
|                                                                                     | K3-200                   | for 3 terminals | <b>LG10405</b>  | 1            | 0,18             |
|                                                                                     | K3-315, K3-450           | for 3 terminals | <b>LG10406</b>  | 1            | 0,28             |
|                                                                                     | K3-550                   | for 3 terminals | <b>LG10407</b>  | 1            | 0,34             |
|                                                                                     | K3-700                   | for 3 terminals | <b>LG10408</b>  | 1            | 0,39             |
|                                                                                     | K3-860                   | for 3 terminals | <b>LG10409</b>  | 1            | 0,49             |

### Additional Terminals

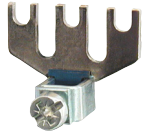
|                                                                                     | For Contactors                                                      | Cable Cross-sections to clamp mm <sup>2</sup><br>solid or<br>stranded | flexible           | flex. with multi-<br>core cable end | Type           | Pack<br>pcs. | Weight<br>kg/pc. |
|-------------------------------------------------------------------------------------|---------------------------------------------------------------------|-----------------------------------------------------------------------|--------------------|-------------------------------------|----------------|--------------|------------------|
|  | <b>Additional Terminal Single Pole, with fingertouch protection</b> |                                                                       |                    |                                     |                |              |                  |
|                                                                                     | K(G)3-10 to K(G)3-22                                                | 0,75 - 10                                                             | 0,75 - 6           | 0,75 - 6                            | <b>LG9339N</b> | 6            | 0,009            |
|                                                                                     | K2-09 to K2-16                                                      |                                                                       |                    |                                     |                |              |                  |
|                                                                                     | K3-151 to K3-176                                                    |                                                                       | 16 - 120 + 16 - 95 |                                     | <b>LG11224</b> | 1            | 0,10             |

1) Inclusively mounting clamps

# Contactor Accessories

## For Series K3 & KG3 Series Contactors

### Parallel Connectors



| For Contactors | Cable Cross-sections to clamp mm <sup>2</sup><br>solid or<br>stranded | flexible | flex. with multi-<br>core cable end | Type | Pack<br>pcs. | Weight<br>kg/pc. |
|----------------|-----------------------------------------------------------------------|----------|-------------------------------------|------|--------------|------------------|
|----------------|-----------------------------------------------------------------------|----------|-------------------------------------|------|--------------|------------------|

#### Parallel Connectors, 3 Poles Parallel

Current-carrying capacity: 2,5 x AC1-value of the contactor

|                      |                            |        |        |               |    |       |
|----------------------|----------------------------|--------|--------|---------------|----|-------|
| K(G)3-10 to K(G)3-22 | terminal hole for screw M5 |        |        | <b>LG9241</b> | 50 | 0,004 |
| K2-09 to K2-16       |                            |        |        |               |    |       |
| K2-23 to K2-37       | 4 - 35                     | 6 - 25 | 4 - 25 | <b>LG5587</b> | 10 | 0,022 |

#### Parallel Connectors, 4 Poles Parallel

Current-carrying capacity: 3,2 x AC1-value of the contactor

|                      |                            |  |  |               |    |       |
|----------------------|----------------------------|--|--|---------------|----|-------|
| K(G)3-10 to K(G)3-22 | terminal hole for screw M5 |  |  | <b>LG7360</b> | 10 | 0,006 |
| K2-09 to K2-16       |                            |  |  |               |    |       |

### Suppressor Units



| Voltage Range<br>V | Mounting | Type | Pack<br>pcs. | Weight<br>kg/pc. |
|--------------------|----------|------|--------------|------------------|
|--------------------|----------|------|--------------|------------------|

#### RC-units for contactors K3-07 - K3-74

|                  |           |                  |                   |    |      |
|------------------|-----------|------------------|-------------------|----|------|
| 12 - 48V AC/DC   | to snap   | 1600nF / 22 Ohm  | <b>RC-K3N 24</b>  | 10 | 0,01 |
| 48 - 127V AC/DC  | on the    | 680nF / 270 Ohm  | <b>RC-K3N 110</b> | 10 | 0,01 |
| 110 - 230V AC/DC | contactor | 220nF / 2200 Ohm | <b>RC-K3N 230</b> | 10 | 0,01 |
| 230 - 415V AC/DC |           | 120nF / 620 Ohm  | <b>RC-K3N 400</b> | 10 | 0,01 |

#### RC-units for contactors K3-07 - K3-74 and reversing contactors K3NWU10 - K3WU74

|                  |           |                  |                    |    |      |
|------------------|-----------|------------------|--------------------|----|------|
| 12 - 48V AC/DC   | to snap   | 1600nF / 22 Ohm  | <b>RC-K3NW 24</b>  | 10 | 0,01 |
| 48 - 127V AC/DC  | on the    | 680nF / 270 Ohm  | <b>RC-K3NW 110</b> | 10 | 0,01 |
| 110 - 230V AC/DC | contactor | 220nF / 2200 Ohm | <b>RC-K3NW 230</b> | 10 | 0,01 |
| 230 - 415V AC/DC |           | 120nF / 620 Ohm  | <b>RC-K3NW 400</b> | 10 | 0,01 |

### Mounting Parts



| Description | For Type | Specification | Type | Pack<br>pcs. | Weight<br>kg/pc. |
|-------------|----------|---------------|------|--------------|------------------|
|-------------|----------|---------------|------|--------------|------------------|

|                               |                                   |                                                              |               |    |       |
|-------------------------------|-----------------------------------|--------------------------------------------------------------|---------------|----|-------|
| <b>Clamp,<br/>no distance</b> | K3-07 to K3-115<br>K2-07 to K2-37 | To join contactors<br>without distance,<br>2 pieces required | <b>P426-1</b> | 50 | 0,001 |
|-------------------------------|-----------------------------------|--------------------------------------------------------------|---------------|----|-------|



|                                |                                   |                                                               |               |    |       |
|--------------------------------|-----------------------------------|---------------------------------------------------------------|---------------|----|-------|
| <b>Clamp,<br/>7mm distance</b> | K3-07 to K3-115<br>K2-07 to K2-37 | To join contactors<br>with 7mm distance,<br>2 pieces required | <b>P418-1</b> | 10 | 0,002 |
|--------------------------------|-----------------------------------|---------------------------------------------------------------|---------------|----|-------|

|                                 |                                   |                                                                |               |    |       |
|---------------------------------|-----------------------------------|----------------------------------------------------------------|---------------|----|-------|
| <b>Clamp,<br/>12mm distance</b> | K3-07 to K3-115<br>K2-07 to K2-37 | To join contactors<br>with 12mm distance,<br>2 pieces required | <b>P807-1</b> | 10 | 0,002 |
|---------------------------------|-----------------------------------|----------------------------------------------------------------|---------------|----|-------|

|                             |                                       |                                                               |               |    |       |
|-----------------------------|---------------------------------------|---------------------------------------------------------------|---------------|----|-------|
| <b>Clamp<br/>asymmetric</b> | K3-07 to K3-40<br>with K3-50 to K3-74 | o join contactors<br>with 12mm distance,<br>2 pieces required | <b>P785-1</b> | 10 | 0,002 |
|-----------------------------|---------------------------------------|---------------------------------------------------------------|---------------|----|-------|



|                        |                |                    |             |  |  |
|------------------------|----------------|--------------------|-------------|--|--|
| <b>Retention clamp</b> | K3-10 to K3-74 | o close contactors | <b>P725</b> |  |  |
|------------------------|----------------|--------------------|-------------|--|--|

### Marking System for contactors K3-07.. to K3-115.., K2-.. and aux. contact blocks HN and HA



| Description | Specification | Type | Pack<br>pcs. | Weight<br>kg/100pc |
|-------------|---------------|------|--------------|--------------------|
|-------------|---------------|------|--------------|--------------------|

|                      |                                      |               |     |       |
|----------------------|--------------------------------------|---------------|-----|-------|
| <b>Marking Plate</b> | 2-section without marking, divisible | <b>P487-1</b> | 100 | 0,025 |
|----------------------|--------------------------------------|---------------|-----|-------|

|                      |                                      |               |     |       |
|----------------------|--------------------------------------|---------------|-----|-------|
| <b>Marking Plate</b> | 3-section without marking, divisible | <b>P971-1</b> | 100 | 0,038 |
|----------------------|--------------------------------------|---------------|-----|-------|

|                      |                                      |               |     |       |
|----------------------|--------------------------------------|---------------|-----|-------|
| <b>Marking Plate</b> | 4-section without marking, divisible | <b>P245-1</b> | 100 | 0,050 |
|----------------------|--------------------------------------|---------------|-----|-------|

|                      |                            |                 |     |       |
|----------------------|----------------------------|-----------------|-----|-------|
| <b>Marking Plate</b> | marked, choice of K1...K32 | <b>P245-K..</b> | 100 | 0,013 |
|----------------------|----------------------------|-----------------|-----|-------|

## Contactor Accessories

For Series K3 & KG3 Series Contactors

### Accessories

Data according to IEC 947-5-1, EN 60947-5-1, VDE 0660

| Type                                                                                                                                                                                 |                     | HN              | HTN      | HA       | HB       | HKT<br>HKA | HKF<br>HKB | K2-DK<br>K2-SK | K2-TP    | K2-L <sup>2)</sup> |    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|-----------------|----------|----------|----------|------------|------------|----------------|----------|--------------------|----|
| <b>Rated insulation voltage U<sub>i</sub></b> <sup>1)</sup>                                                                                                                          | V AC                | 690             | 690      | 690      | 690      | 690        | 690        | 690            | 690      | 690                |    |
| <b>Thermal rated current I<sub>th</sub></b> to bis 690V<br>Ambient temperature                                                                                                       | max. 40°C           | 10              | 10       | 25       | 10       | 10         | 16         | 26             | 10       | 10                 |    |
|                                                                                                                                                                                      | max. 60°C           | 6               | 6        | 20       | 6        | -          | -          | -              | -        | 6                  |    |
| <b>Frequency of operations z</b>                                                                                                                                                     | 1/h                 | 3000            | -        | 3000     | 3000     | -          | -          | -              | 1200     | 3000               |    |
| <b>Mechanical life</b>                                                                                                                                                               | S x 10 <sup>6</sup> | 10              | 10       | 10       | 10       | -          | -          | -              | 1        | 10                 |    |
| <b>Power loss</b> per pole at I <sub>N</sub> /AC1                                                                                                                                    | W                   | 0,5             | 0,5      | 1,5      | 0,5      | -          | -          | -              | -        | -                  |    |
| <b>Utilization category AC15</b>                                                                                                                                                     |                     |                 |          |          |          |            |            |                |          |                    |    |
| Rated operational current I <sub>e</sub>                                                                                                                                             | 220-240V A          | 3               | 3        | 6        | 3        | 3          | 3          | -              | 4        | 3                  |    |
|                                                                                                                                                                                      | 380-400V A          | 2               | 2        | 3        | 2        | 2          | 2          | -              | 3        | 2                  |    |
|                                                                                                                                                                                      | 440V A              | 1,6             | 1,6      | 2        | 1,6      | 1,5        | 1,5        | -              | 2        | 1,6                |    |
|                                                                                                                                                                                      | 500V A              | 1,2             | 1,2      | 2        | 1,2      | 1,5        | 1,5        | -              | 2        | 1                  |    |
|                                                                                                                                                                                      | 660-690V A          | 0,6             | 0,6      | 1        | 0,6      | 1          | 1          | -              | 2        | 0,5                |    |
| <b>Utilization category DC13</b>                                                                                                                                                     |                     |                 |          |          |          |            |            |                |          |                    |    |
| Rated operational current I <sub>e</sub>                                                                                                                                             | 60V A               | 2               | 2        | 8        | 2        | -          | -          | -              | 2,5      | 2                  |    |
|                                                                                                                                                                                      | 110V A              | 0,4             | 0,4      | 1        | 0,4      | 0,5        | 0,5        | -              | 1,5      | 0,4                |    |
|                                                                                                                                                                                      | 220V A              | 0,1             | 0,1      | 0,1      | 0,1      | 0,2        | 0,2        | -              | 0,2      | 0,1                |    |
| <b>Short circuit protection</b><br>short-circuit current 1kA,<br>contact welding not accepted<br>max. fuse size                                                                      |                     | gL (gG) A       | 20       | 20       | 25       | 20         | 10         | 10             | -        | 10                 | 10 |
| For contactors with thermal overload relay or auxiliary contacts the device with the smaller admissible control fuse (contactor or thermal overload relay) determines the fuse size. |                     |                 |          |          |          |            |            |                |          |                    |    |
| <b>Cable cross-sections</b>                                                                                                                                                          |                     |                 |          |          |          |            |            |                |          |                    |    |
| solid or stranded                                                                                                                                                                    | mm <sup>2</sup>     | 0,75-2,5        | 0,75-2,5 | 0,75-2,5 | 0,75-2,5 | 0,75-2,5   | 0,75-2,5   | 0,75-2,5       | 1-2,5    | 0,75-2,5           |    |
|                                                                                                                                                                                      | flexible            | mm <sup>2</sup> | 0,75-2,5 | 0,75-2,5 | 0,75-2,5 | 0,75-2,5   | 0,75-2,5   | 0,75-2,5       | 0,75-2,5 | 0,75-2,5           |    |
| flexible with multicore cable end                                                                                                                                                    | mm <sup>2</sup>     | 0,5-1,5         | 0,5-1,5  | 0,5-1,5  | 0,5-1,5  | 0,5-1,5    | 0,5-1,5    | 0,5-1,5        | 0,75-2,5 | 0,5-1,5            |    |
| solid                                                                                                                                                                                | AWG                 | 14              | 14       | 14       | 14       | 14         | 14         | 14             | 14       | 14                 |    |
|                                                                                                                                                                                      | flexible            | AWG             | 18       | 18       | 18       | 18         | 18         | 18             | 18       | 18                 |    |
| Cables per clamp                                                                                                                                                                     |                     | 2               | 2        | 2        | 2        | 2          | 2          | 2              | 2        | 2                  |    |

### Data according to CSA, UL and CUL

| Type                                    |           | HN   | HTN  | HA   | HB.. | HKA, HKT<br>HKF | K2-DK<br>K2-SK | K2-TP | K2-L <sup>2)</sup> |
|-----------------------------------------|-----------|------|------|------|------|-----------------|----------------|-------|--------------------|
| Rated operational current "General Use" | A         | 10   | 10   | 16   | 10   | 10              | -              | 10    | -                  |
| Rated operational voltage               | max. V AC | 600  | 600  | 600  | 600  | 600             | -              | 600   | 600                |
| <b>Auxiliary Contacts</b>               |           | A600 | A600 | A600 | A600 | A600            | -              | A600  | Intermittent duty  |

1) Suitable for: earthed-neutral systems, overvoltage category I to IV, pollution degree 3 (standard-industry): U<sub>imp</sub> = 8kV. Data for other conditions on request.

2) Command duration min. 30ms, 10% duty cycle, max. 30 sec.

# Contactor Accessories

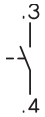
For Series K3 & KG3 Series Contactors

## Contactors and Accessories

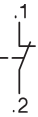
### Wiring diagrams

#### Auxiliary contact blocks

HN10  
HA10



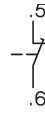
HN01  
HA01



HN10U

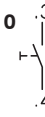


HN01U

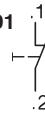


#### Snap-on momentary contact blocks

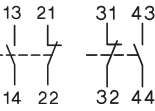
HTN10



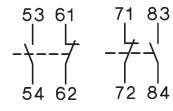
HTN01



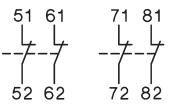
HKS11  
HKA11



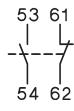
HB11-1  
HB11



HB02

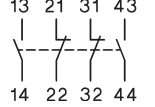


HKT11

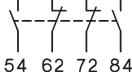


HB11, HB02:  
Correct terminal marking  
is given by mounting.

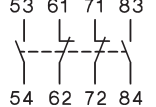
HKF22



53 61 71 83

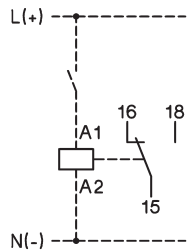


HKT22



#### Electronic timer

K3-T180 240

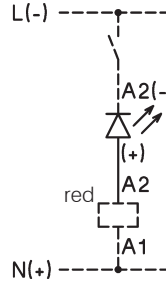


#### Indicator units

##### Coil current indicator

K2-ING

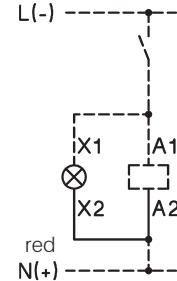
K2-INR



##### Voltage indicator

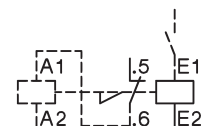
K2-UN

K2-UNR



#### Latch

K2-L..



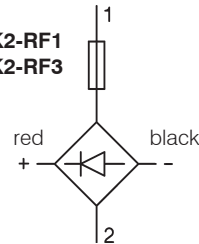
#### Fuse holder

K2-F



with rectifier

K2-RF1  
K2-RF3



Colours mentioned in  
wiring diagram refer  
to the outgoing  
connection wires of  
the device.

# Contactor Accessories

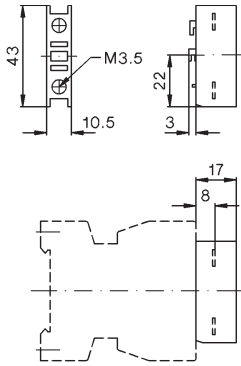
For Series K3 & KG3 Series Contactors

## Dimensions Accessories

Aux. cont. blocks, terminal blocks

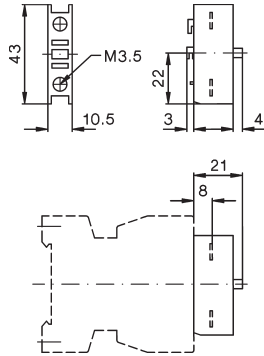
HN10, HN01

K2-SK, K2-DK



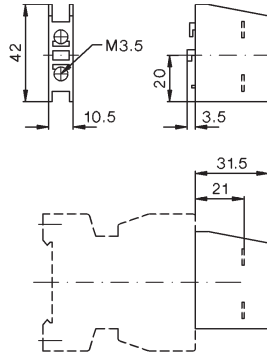
Snap-on momentary cont. blocks

HTN10, HTN01

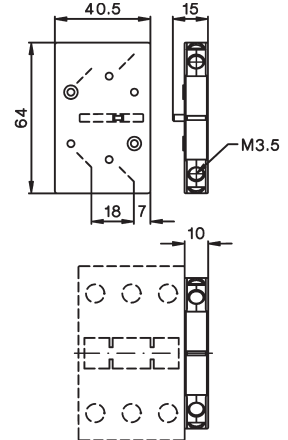


Auxiliary contact blocks

HA10, HA01

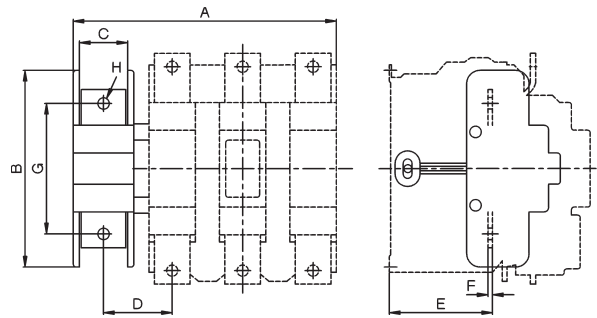


HB11-1,



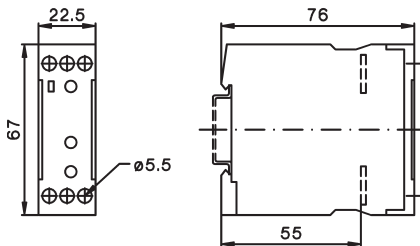
## 4. pole for contactors K3-200 to K3-12

| Type   | A   | B   | C  | D   | E   | F | G   | H   |
|--------|-----|-----|----|-----|-----|---|-----|-----|
| NP175  | 223 | 148 | 26 | 52  | 98  | 5 | 122 | M8  |
| NP350  | 223 | 148 | 26 | 52  | 98  | 5 | 122 | M8  |
| NP325  | 262 | 148 | 26 | 55  | 116 | 5 | 122 | M10 |
| NP500  | 294 | 220 | 53 | 72  | 138 | 5 | 152 | M12 |
| NP760  | 294 | 220 | 53 | 72  | 138 | 5 | 152 | M12 |
| NP501  | 348 | 220 | 53 | 73  | 145 | 5 | 152 | M12 |
| NP1000 | 348 | 220 | 53 | 73  | 145 | 8 | 152 | M12 |
| NP1001 | 410 | 220 | 53 | 110 | 157 | 8 | 152 | M12 |



## Electronic timer

K3-T180 240



## Electronic timer on-delay

K2-TE..

