



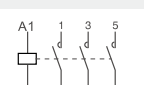

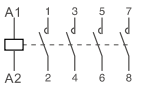
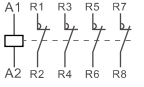
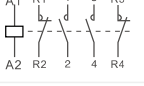


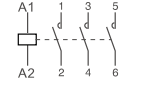
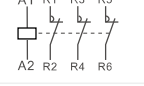





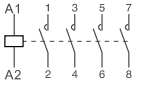

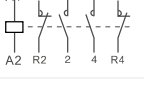
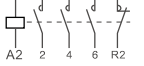








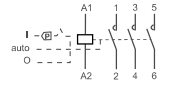
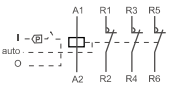
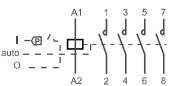
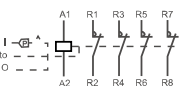
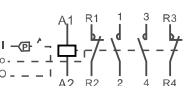
### Automatic Type Product Selection Form

| Width  | Coil voltage<br>VAC | Poles   | Contacts<br>NO+NC | Contactor Model | Rated Current |             | Circuit Diagram |
|--|---------------------|---------|-------------------|-----------------|---------------|-------------|-----------------|
|  |                     |         |                   |                 | AC-1, AC-7a   | AC-3, AC-7b |                 |
| <br>1 Modules   | 24<br>110<br>230    | 1P      | 1NO               | EKMF-1610       | 16A           | 6A          |                 |
|  |                     |         |                   | EKMF-2010       | 20A           | 7A          |                 |
|  |                     |         |                   | EKMF-2510       | 25A           | 9A          |                 |
|  |                     |         | 1NC               | EKMF-1601       | 16A           | 6A          |                 |
|  |                     |         |                   | EKMF-2001       | 20A           | 7A          |                 |
|  |                     |         |                   | EKMF-2501       | 25A           | 9A          |                 |
|  |                     | 2P      | 2NO               | EKMF-1620       | 16A           | 6A          |                 |
|  |                     |         |                   | EKMF-2020       | 20A           | 7A          |                 |
|  |                     |         |                   | EKMF-2520       | 25A           | 9A          |                 |
|  |                     |         | 1NO+1NC           | EKMF-1611       | 16A           | 6A          |                 |
|  |                     |         |                   | EKMF-2011       | 20A           | 7A          |                 |
|  |                     |         |                   | EKMF-2511       | 25A           | 9A          |                 |
| 2NC  | EKMF-1602           | 16A     | 6A                |                 |               |             |                 |
|  | EKMF-2002           | 20A     | 7A                |                 |               |             |                 |
|  | EKMF-2502           | 25A     | 9A                |                 |               |             |                 |
| <br>2 Modules | 24<br>110<br>230    | 1P      | 1NO               | EKMF-3210       | 32A           | 12A         |                 |
|  |                     |         |                   | EKMF-4010       | 40A           | 18A         |                 |
|  |                     |         |                   | EKMF-6310       | 63A           | 25A         |                 |
|  |                     |         | 1NC               | EKMF-3201       | 32A           | 12A         |                 |
|  |                     |         |                   | EKMF-4001       | 40A           | 18A         |                 |
|  |                     |         |                   | EKMF-6301       | 63A           | 25A         |                 |
|  |                     | 2P      | 2NO               | EKMF-3220       | 32A           | 12A         |                 |
|  |                     |         |                   | EKMF-4020       | 40A           | 18A         |                 |
|  |                     |         |                   | EKMF-6320       | 63A           | 25A         |                 |
|  |                     |         | 1NO+1NC           | EKMF-3211       | 32A           | 12A         |                 |
|  |                     |         |                   | EKMF-4011       | 40A           | 18A         |                 |
|  |                     |         |                   | EKMF-6311       | 63A           | 25A         |                 |
| 2NC  | EKMF-3202           | 32A     | 12A               |                 |               |             |                 |
|  | EKMF-4002           | 40A     | 18A               |                 |               |             |                 |
|  | EKMF-6302           | 63A     | 25A               |                 |               |             |                 |
| <br>3 Modules | 24<br>110<br>230    | 2P      | 2NO               | EKMF-8020       | 80A           | 32A         |                 |
|  |                     |         |                   | EKMF-10020      | 100A          | 40A         |                 |
|  |                     |         |                   | EKMF-12520      | 125A          | 50A         |                 |
|  |                     | 1NO+1NC | EKMF-8011         | 80A             | 32A           |             |                 |
|  |                     |         | EKMF-10011        | 100A            | 40A           |             |                 |
|  |                     |         | EKMF-12511        | 125A            | 50A           |             |                 |
|  |                     | 2NC     | EKMF-8002         | 80A             | 32A           |             |                 |
|  |                     |         | EKMF-10002        | 100A            | 40A           |             |                 |
|  |                     |         | EKMF-12502        | 125A            | 50A           |             |                 |

| Width  | Coil voltage<br>VAC     | Poles | Contacts<br>NO+NC | Contactor Model   | Rated Current |             | Circuit Diagram   |
|--|-------------------------|-------|-------------------|---|---------------|-------------|---|
|  |                         |       |                   |   | AC-1, AC-7a   | AC-3, AC-7b |   |
| <br>2 Modules   | 24<br>110<br>230<br>380 | 3P    | 3NO               | EKMF-1630   | 16A           | 6A          |    |
|  |                         |       |                   | EKMF-2030   | 20A           | 7A          |   |
|  |                         |       |                   | EKMF-2530   | 25A           | 9A          |   |
|  |                         |       | 3NC               | EKMF-1603   | 16A           | 6A          |    |
|  |                         |       |                   | EKMF-2003   | 20A           | 7A          |   |
|  |                         |       |                   | EKMF-2503   | 25A           | 9A          |   |
|  |                         | 4P    | 4NO               | EKMF-1640   | 16A           | 6A          |    |
|  |                         |       |                   | EKMF-2040   | 20A           | 7A          |   |
|  |                         |       |                   | EKMF-2540   | 25A           | 9A          |   |
|  |                         |       | 4NC               | EKMF-1604   | 16A           | 6A          |    |
|  |                         |       |                   | EKMF-2004   | 20A           | 7A          |   |
|  |                         |       |                   | EKMF-2504   | 25A           | 9A          |   |
|  |                         |       | 2NO+2NC           | EKMF-1622   | 16A           | 6A          |    |
|  |                         |       |                   | EKMF-2022   | 20A           | 7A          |   |
|  |                         |       |                   | EKMF-2522   | 25A           | 9A          |   |
| 3NO+1NC  | EKMF-1631               | 16A   | 6A                |    |               |             |   |
|  | EKMF-2031               | 20A   | 7A                |   |               |             |   |
|  | EKMF-2531               | 25A   | 9A                |   |               |             |   |
| <br>3 Modules | 24<br>110<br>230<br>380 | 3P    | 3NO               | EKMF-3230   | 32A           | 12A         |   |
|  |                         |       |                   | EKMF-4030   | 40A           | 18A         |   |
|  |                         |       |                   | EKMF-6330   | 63A           | 25A         |   |
|  |                         |       | 3NC               | EKMF-3203   | 32A           | 12A         |  |
|  |                         |       |                   | EKMF-4003   | 40A           | 18A         |   |
|  |                         |       |                   | EKMF-6303   | 63A           | 25A         |   |
|  |                         | 4P    | 4NO               | EKMF-3240   | 32A           | 12A         |  |
|  |                         |       |                   | EKMF-4040   | 40A           | 18A         |   |
|  |                         |       |                   | EKMF-6340   | 63A           | 25A         |   |
|  |                         |       | 4NC               | EKMF-3204   | 32A           | 12A         |  |
|  |                         |       |                   | EKMF-4004   | 40A           | 18A         |   |
|  |                         |       |                   | EKMF-6304   | 63A           | 25A         |   |
|  |                         |       | 2NO+2NC           | EKMF-3222   | 32A           | 12A         |  |
|  |                         |       |                   | EKMF-4022   | 40A           | 18A         |   |
|  |                         |       |                   | EKMF-6322   | 63A           | 25A         |   |
| 3NO+1NC  | EKMF-3231               | 32A   | 12A               |  |               |             |   |
|  | EKMF-4031               | 40A   | 18A               |   |               |             |   |
|  | EKMF-6331               | 63A   | 25A               |   |               |             |   |
| <br>6 Modules | 24<br>110<br>230<br>380 | 4P    | 4NO               | EKMF-8040   | 80A           | 32A         |  |
|  |                         |       |                   | EKMF-10040  | 100A          | 40A         |   |
|  |                         |       |                   | EKMF-12540  | 125A          | 50A         |   |
|  |                         |       | 4NC               | EKMF-8004   | 80A           | 32A         |  |
|  |                         |       |                   | EKMF-10004  | 100A          | 40A         |   |
|  |                         |       |                   | EKMF-12504  | 125A          | 50A         |   |
|  |                         |       | 2NO+2NC           | EKMF-8022   | 80A           | 32A         |  |
|  |                         |       |                   | EKMF-10022  | 100A          | 40A         |   |
|  |                         |       |                   | EKMF-12522  | 125A          | 50A         |   |
|  |                         |       | 3NO+1NC           | EKMF-8031   | 80A           | 32A         |  |
|  |                         |       |                   | EKMF-10031  | 100A          | 40A         |   |
|  |                         |       |                   | EKMF-12531  | 125A          | 50A         |   |

### Manual Type Product Selection Form



| Width  | Coil voltage<br>VAC | Poles  | Contacts<br>NO+NC       | Contactor Model | Rated Current |             | Circuit Diagram |    |  |
|--|---------------------|--|-------------------------|-----------------|---------------|-------------|-----------------|----|--|
|  |                     |  |                         |                 | AC-1, AC-7a   | AC-3, AC-7b |                 |    |  |
| <br>1 Modules   | 24<br>110<br>230    | 1P   | 1NO                     | EKMF-1610M      | 16A           | 6A          |                 |    |  |
|  |                     |  |                         | EKMF-2010M      | 20A           | 7A          |                 |    |  |
|  |                     |  |                         | EKMF-2510M      | 25A           | 9A          |                 |    |  |
|  |                     |  | 1NC                     | EKMF-1601M      | 16A           | 6A          |                 |    |  |
|  |                     |  |                         | EKMF-2001M      | 20A           | 7A          |                 |    |  |
|  |                     |  |                         | EKMF-2501M      | 25A           | 9A          |                 |    |  |
|  |                     | 2P   | 2NO                     | EKMF-1620M      | 16A           | 6A          |                 |    |  |
|  |                     |  |                         | EKMF-2020M      | 20A           | 7A          |                 |    |  |
|  |                     |  |                         | EKMF-2520M      | 25A           | 9A          |                 |    |  |
|  |                     |  | 1NO+1NC                 | EKMF-1611M      | 16A           | 6A          |                 |    |  |
|  |                     |  |                         | EKMF-2011M      | 20A           | 7A          |                 |    |  |
|  |                     |  |                         | EKMF-2511M      | 25A           | 9A          |                 |    |  |
| 2NC  | EKMF-1602M          | 16A  | 6A                      |                 |               |             |                 |    |  |
|  | EKMF-2002M          | 20A  | 7A                      |                 |               |             |                 |    |  |
|  | EKMF-2502M          | 25A  | 9A                      |                 |               |             |                 |    |  |
| <br>2 Modules | 24<br>110<br>230    | 2P   | 2NO                     | EKMF-3220M      | 32A           | 12A         |                 |    |  |
|  |                     |  |                         | EKMF-4020M      | 40A           | 18A         |                 |    |  |
|  |                     |  |                         | EKMF-6320M      | 63A           | 25A         |                 |    |  |
|  |                     |  | 1NO+1NC                 | EKMF-3211M      | 32A           | 12A         |                 |    |  |
|  |                     |  |                         | EKMF-4011M      | 40A           | 18A         |                 |    |  |
|  |                     |  |                         | EKMF-6311M      | 63A           | 25A         |                 |    |  |
|  |                     | 2NC  | EKMF-3202M              | 32A             | 12A           |             |                 |    |  |
|  |                     |  | EKMF-4002M              | 40A             | 18A           |             |                 |    |  |
|  |                     |  | EKMF-6302M              | 63A             | 25A           |             |                 |    |  |
|  |                     | <br>2 Modules | 24<br>110<br>230<br>380 | 3P              | 3NO           | EKMF-1630M  | 16A             | 6A |  |
|  |                     |  |                         |                 |               | EKMF-2030M  | 20A             | 7A |  |
|  |                     |  |                         |                 |               | EKMF-2530M  | 25A             | 9A |  |
| 3NC  | EKMF-1603M          |  |                         |                 | 16A           | 6A          |                 |    |  |
|  | EKMF-2003M          |  |                         |                 | 20A           | 7A          |                 |    |  |
|  | EKMF-2503M          |  |                         |                 | 25A           | 9A          |                 |    |  |
| 4P   | 4NO                 |  |                         | EKMF-1640M      | 16A           | 6A          |                 |    |  |
|  |                     |  |                         | EKMF-2040M      | 20A           | 7A          |                 |    |  |
|  |                     |  |                         | EKMF-2540M      | 25A           | 9A          |                 |    |  |
|  | 4NC                 |  |                         | EKMF-1604M      | 16A           | 6A          |                 |    |  |
|  |                     |  |                         | EKMF-2004M      | 20A           | 7A          |                 |    |  |
|  |                     |  |                         | EKMF-2504M      | 25A           | 9A          |                 |    |  |
|  | 2NO+2NC             |  |                         | EKMF-1622M      | 16A           | 6A          |                 |    |  |
|  |                     |  |                         | EKMF-2022M      | 20A           | 7A          |                 |    |  |
|  |                     |  |                         | EKMF-2522M      | 25A           | 9A          |                 |    |  |
| 3NO+1NC  | EKMF-1631M          |  |                         | 16A             | 6A            |             |                 |    |  |
|  | EKMF-2031M          |  |                         | 20A             | 7A            |             |                 |    |  |
|  | EKMF-2531M          |  |                         | 25A             | 9A            |             |                 |    |  |

| Width  | Coil voltage VAC        | Poles | Contacts NO+NC | Contactor Model | Rated Current |             | Circuit Diagram   |   |   |
|--|-------------------------|-------|----------------|-----------------|---------------|-------------|---|---|---|
|  |                         |       |                |                 | AC-1, AC-7a   | AC-3, AC-7b |   |   |   |
| <br>3 Modules | 24<br>110<br>230<br>380 | 3P    | 3NO            | EKMF-3230M      | 32A           | 12A         |  |   |   |
|  |                         |       |                | EKMF-4030M      | 40A           | 18A         |   |   |   |
|  |                         |       |                | EKMF-6330M      | 63A           | 25A         |   |   |   |
|  |                         |       | 3NC            | EKMF-3203M      | 32A           | 12A         |   |  |   |
|  |                         |       |                | EKMF-4003M      | 40A           | 18A         |   |   |   |
|  |                         |       |                | EKMF-6303M      | 63A           | 25A         |   |   |   |
|  |                         | 4P    | 4NO            | EKMF-3240M      | 32A           | 12A         |  |   |   |
|  |                         |       |                | EKMF-4040M      | 40A           | 18A         |   |   |   |
|  |                         |       |                | EKMF-6340M      | 63A           | 25A         |   |   |   |
|  |                         |       |                | 4NC             | EKMF-3204M    | 32A         |   | 12A   |   |
|  |                         |       |                |                 | EKMF-4004M    | 40A         |   | 18A   |   |
|  |                         |       |                |                 | EKMF-6304M    | 63A         |   | 25A   |   |
|  |                         |       | 2NO+2NC        | EKMF-3222M      | 32A           | 12A         |   |  |   |
|  |                         |       |                | EKMF-4022M      | 40A           | 18A         |   |   |   |
|  |                         |       |                | EKMF-6322M      | 63A           | 25A         |   |   |   |
|  |                         |       | 3NO+1NC        | EKMF-3231M      | 32A           | 12A         |   |   |  |
|  |                         |       |                | EKMF-4031M      | 40A           | 18A         |   |   |   |
|  |                         |       |                | EKMF-6331M      | 63A           | 25A         |   |   |   |

## Modular Contactor Auxiliary

### Auxiliary Contacts

The Auxiliary contacts are indicator contactor contacts status switch OFF or ON

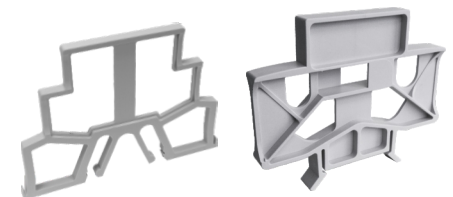
|            | AC-12 |      | AC-15 |      | DC-13   |      | Rated Current | Circuit Diagram  |
|------------|-------|------|-------|------|---------|------|---------------|--|
|            | C.V.  | C.A. | C.V.  | C.A. | C.V.    | C.A. |               |  |
| EKMF-OF-11 | 240V  | 5A   | 230V  | 2A   | DC 130V | 1A   | 5A            |  |
| EKMF-OF-20 | 240V  | 5A   | 230V  | 2A   | DC 130V | 1A   | 5A            |  |



### Spacing Piece

Spacers are used to reduce the temperature rise of devices mounted side by side. It is recommended to separate electronic equipment (temperature adjustment devices, programmable timer etc.) from electromechanical equipment (impulse relays, contactors)

|               | Technical specifications |
|---------------|--------------------------|
| Spacing piece | 3mm Spacing piece        |
|               | 9mm Spacing piece        |

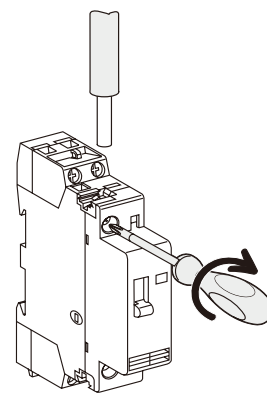


### Consumption

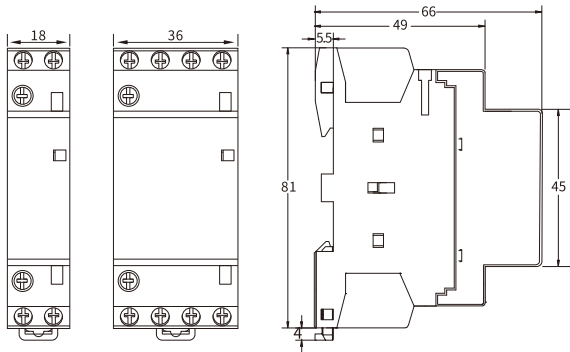
| Poles | Rated Current |       | Control voltage (VAC) | Power consumption |        | Max. power |
|-------|---------------|-------|-----------------------|-------------------|--------|------------|
|       | AC-7a         | AC-7b |                       | Holding           | Inrush |            |
| 1P    | 16A           | 6A    | 230                   | 2.8VA             | 11.5VA | 1.2W       |
|       | 20A           | 7A    | 230                   | 2.8VA             | 11.5VA | 1.2W       |
|       | 25A           | 9A    | 230                   | 2.8VA             | 11.5VA | 1.2W       |
| 2P    | 16A           | 6A    | 230                   | 2.8VA             | 11.5VA | 1.2W       |
|       | 20A           | 7A    | 230                   | 2.8VA             | 11.5VA | 1.2W       |
|       | 25A           | 9A    | 230                   | 2.8VA             | 11.5VA | 1.2W       |
|       | 32A           | 12A   | 230                   | 4.1VA             | 31VA   | 1.6W       |
|       | 40A           | 18A   | 230                   | 4.1VA             | 31VA   | 1.6W       |
|       | 63A           | 25A   | 230                   | 4.1VA             | 31VA   | 1.6W       |
|       | 100A          | -     | 230                   | 4.1VA             | 31VA   | 2.1W       |
| 3P    | 16A           | 6A    | 230                   | 4.1VA             | 31VA   | 1.6W       |
|       | 20A           | 7A    | 230                   | 4.1VA             | 31VA   | 1.6W       |
|       | 25A           | 9A    | 230                   | 4.1VA             | 31VA   | 1.6W       |
|       | 32A           | 12A   | 230                   | 7VA               | 48VA   | 2.1W       |
|       | 40A           | 18A   | 230                   | 7VA               | 48VA   | 2.1W       |
|       | 63A           | 25A   | 230                   | 7VA               | 48VA   | 2.1W       |
| 4P    | 16A           | 6A    | 230                   | 4.1VA             | 31VA   | 1.6W       |
|       | 20A           | 7A    | 230                   | 4.1VA             | 31VA   | 1.6W       |
|       | 25A           | 9A    | 230                   | 4.1VA             | 31VA   | 1.6W       |
|       | 32A           | 12A   | 230                   | 7VA               | 48VA   | 2.1W       |
|       | 40A           | 18A   | 230                   | 7VA               | 48VA   | 2.1W       |
|       | 63A           | 25A   | 230                   | 7VA               | 48VA   | 2.1W       |
|       | 100A          | -     | 230                   | 13VA              | 106VA  | 4.2W       |

### Connection Parameter

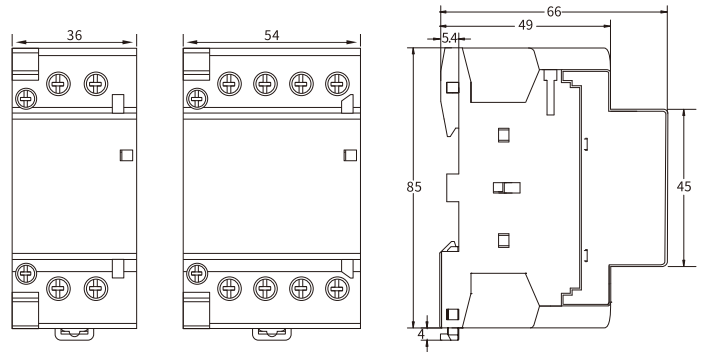
| Type | Rated Current | Length tripping | Circuit | Tightening torque | Copper cables |  |  |
|------|---------------|-----------------|---------|-------------------|---------------|--|--|
|      |               |                 |         |                   | Rigid         | Flexible or Ferrule                            |  |
| EKMF | PZ1: 4mm      | 16-100A         | 9mm     | Control           | 0.8N.m        | 1.5~2.5mm <sup>2</sup><br>2x1.5mm <sup>2</sup> | 1.5~2.5mm <sup>2</sup><br>2x2.5mm <sup>2</sup> |
|      |               | 16-25A          | 9mm     | Power             | 0.8N.m        | 1.5~6mm <sup>2</sup>                           | 1~4mm <sup>2</sup>                             |
|      | PZ2: 6mm      | 40-63A          | 14mm    | Power             | 3.5N.m        | 6~25mm <sup>2</sup>                            | 6~16mm <sup>2</sup>                            |
|      |               | 100A            | 14mm    | Power             | 3.5N.m        | 6x3.5mm <sup>2</sup>                           | 6~35mm <sup>2</sup>                            |



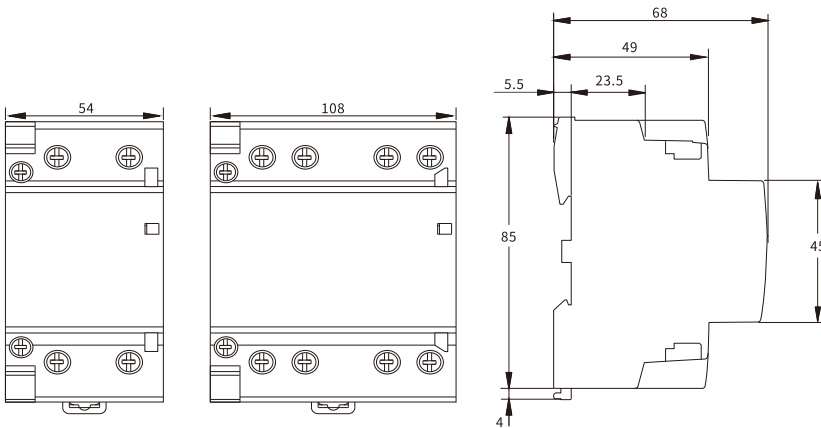
### Overall and Installation Dimension(mm)



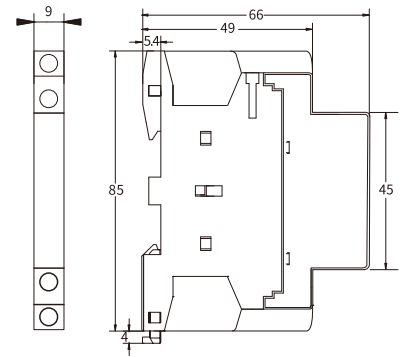
EKMF-16/20/25A



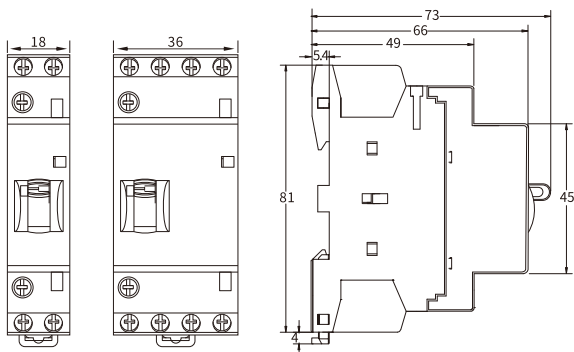
EKMF-32/40/63A



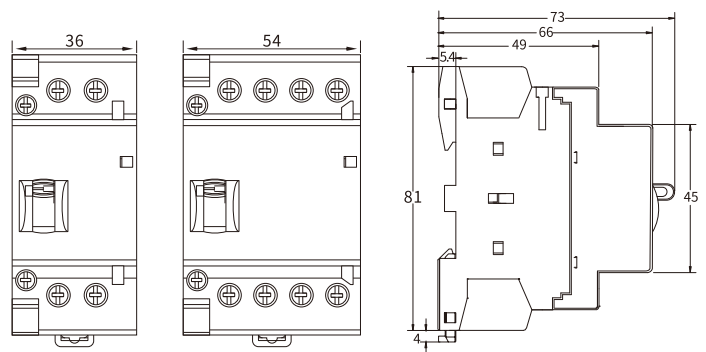
EKMF-80/100/125A



EKMF-OF



EKMF manual control contactor 16/25A



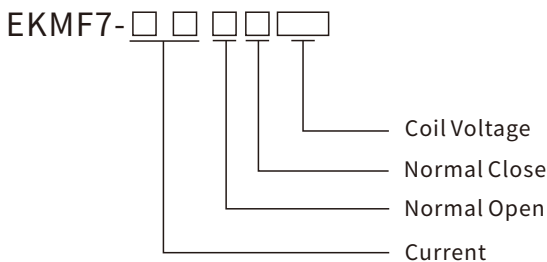
EKMF manual control contactor 40/63A

### Applicable Scope

The EKMF7 modular contactor (hereinafter referred to as contactor) is mainly suitable for AC 50Hz (or 60Hz), rated working voltage to 400V and rated current operation in the circuit up to 63A, it can control the low-inductance and low-inductance load of household appliances and similar purposes; it can also be used to control the load of household motors. The power should be reduced accordingly.

The EKMF7 contactors according to standard IEC/EN61095, IEC60947-4-1 and are used mainly in buildings for switching and controlling lighting, heating, ventilation and pumps. They are part of the complete range of Din rail products and can be integrated easily in dedicated panels.

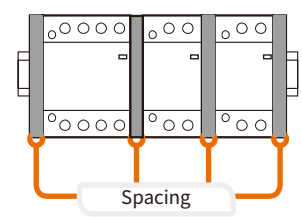
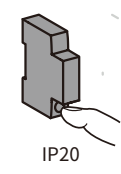
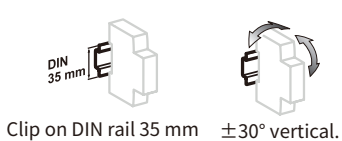
### Modular Contactor



(eg. EKMF7-2520-24V AC/DC . It is 25A, 2NO, 24V AC/DC current coil voltage)

### Main Technical Data

|   |   |   |
|---|---|---|
| Rated operational voltage (Ue)                                      | 250VAC                                      | 1P(1NO,1NC),2P(2NO,2NC,1NO+1NC)         |
|   | 400VAC                                      | 3P(3NO,3NC),4P(4NO,4NC,2NO+2NC,3NO+1NC) |
| Frequency   | 50/60Hz                                     |   |
| Mechanical life   | 1,000,000 cycles                            |   |
| Electrical life   | 100,000 cycles                              |   |
| Maximum number of switching operation a day                         | 100   |   |
| Insulation voltage (Ui)   | 500V AC                                     |   |
| Pollution degree  | 2   |   |
| Rated impulse withstand voltage (Uimp)                              | 2.5kV (4kV for 12/24/48VAC)                 |   |
| Degree of protection (IEC 60529)                                    | IP20  |   |
| Operating temperature   | -5°C~+60°C                                  |   |
| Storage temperature   | -40°C~+70°C                                 |   |
| Tropicalization (IEC 60068.1)                                       | Treatment 2 (relative humidity 95% at 55°C) |   |
| ELSV compliance (Extra Low Safety Voltage) for 12/24/48VAC versions |   |   |


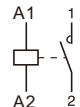
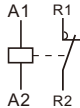
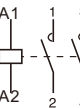
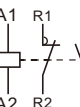
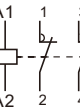

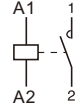
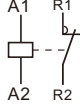
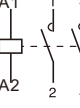
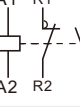




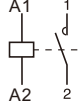
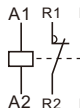
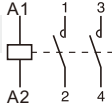
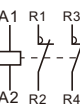
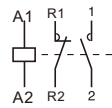


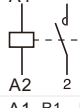
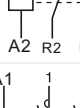
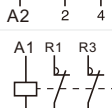
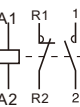
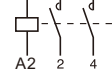

The product control conforms to the SELV (safety extra low voltage) requirements

(1)In the case of contactor mounting in a enclosure for which the interior temperature is in range between 50 °C and 60 °C, it is necessary to use a spacer, between each contactor



### Product Selection Form

| Width  | Coil voltage VAC  | Poles      | Contacts NO+NC | Contactor Model | Rated Current   |             | Circuit Diagram   |
|--|---|------------|----------------|-----------------|---|-------------|---|
|  |   |            |                |                 | AC-1, AC-7a   | AC-3, AC-7b |   |
| <br>1 Modules  | 12V AC/DC<br>24V AC/DC<br>48V AC/DC<br>110V AC/DC<br>230V AC/DC | 1P         | 1NO            | EKMF7-1610      | 16A   | 6A          |    |
|  |   |            |                | EKMF7-2010      | 20A   | 7A          |   |
|  |   |            |                | EKMF7-2510      | 25A   | 9A          |   |
|  |   |            |                | EKMF7-3210      | 32A   | 12A         |   |
|  |   | 1P         | 1NC            | EKMF7-1601      | 16A   | 6A          |    |
|  |   |            |                | EKMF7-2001      | 20A   | 7A          |   |
|  |   |            |                | EKMF7-2501      | 25A   | 9A          |   |
|  |   |            |                | EKMF7-3201      | 32A   | 12A         |   |
|  |   | 2P         | 2NO            | EKMF7-1620      | 16A   | 6A          |    |
|  |   |            |                | EKMF7-2020      | 20A   | 7A          |   |
|  |   |            |                | EKMF7-2520      | 25A   | 9A          |   |
|  |   |            |                | EKMF7-3220      | 32A   | 12A         |   |
|  |   | 2P         | 1NO+1NC        | EKMF7-1611      | 16A   | 6A          |  |
|  |   |            |                | EKMF7-2011      | 20A   | 7A          |   |
|  |   |            |                | EKMF7-2511      | 25A   | 9A          |   |
|  |   |            |                | EKMF7-3211      | 32A   | 12A         |   |
| 2P   | 2NC   | EKMF7-1602 | 16A            | 6A              |  |             |   |
|  |   | EKMF7-2002 | 20A            | 7A              |   |             |   |
|  |   | EKMF7-2502 | 25A            | 9A              |   |             |   |
|  |   | EKMF7-3202 | 32A            | 12A             |   |             |   |
| <br>2 Modules | 12V AC/DC<br>24V AC/DC<br>48V AC/DC<br>110V AC/DC<br>230V AC/DC | 1P         | 1NO            | EKMF7-4010      | 40A   | 18A         |  |
|  |   |            |                | EKMF7-6310      | 63A   | 25A         |   |
|  |   | 1P         | 1NC            | EKMF7-4001      | 40A   | 18A         |  |
|  |   |            |                | EKMF7-6301      | 63A   | 25A         |   |
|  |   | 2P         | 2NO            | EKMF7-4020      | 40A   | 18A         |  |
|  |   |            |                | EKMF7-6320      | 63A   | 25A         |   |
|  |   | 2P         | 1NO+1NC        | EKMF7-4011      | 40A   | 18A         |  |
|  |   |            |                | EKMF7-6311      | 63A   | 25A         |   |
|  |   | 2P         | 2NC            | EKMF7-4002      | 40A   | 18A         |  |
|  |   |            |                | EKMF7-6302      | 63A   | 25A         |   |

| Width  | Coil voltage<br>VAC   | Poles      | Contacts<br>NO+NC | Contactor Model   | Rated Current   |   | Circuit Diagram   |   |
|--|---|------------|-------------------|---|---|---|---|---|
|  |   |            |                   |   | AC-1, AC-7a   | AC-3, AC-7b   |   |   |
| <br>2 Modules   | 12V AC/DC<br>24V AC/DC<br>48V AC/DC<br>110V AC/DC<br>230V AC/DC | 3P         | 3NO               | EKMF7-1630  | 16A   | 6A  |    |   |
|  |   |            |                   | EKMF7-2030  | 20A   | 7A  |   |   |
|  |   |            |                   | EKMF7-2530  | 25A   | 9A  |   |   |
|  |   |            |                   | EKMF7-3230  | 32A   | 12A   |   |   |
|  |   |            | 3NC               | EKMF7-1603  | 16A   | 6A  |    |   |
|  |   |            |                   | EKMF7-2003  | 20A   | 7A  |   |   |
|  |   | EKMF7-2503 |                   | 25A   | 9A  |   |   |   |
|  |   | EKMF7-3203 |                   | 32A   | 12A   |   |   |   |
|  |   | 4P         | 4NO               | EKMF7-1640  | 16A   | 6A  |    |   |
|  |   |            |                   | EKMF7-2040  | 20A   | 7A  |   |   |
|  |   |            |                   | EKMF7-2540  | 25A   | 9A  |   |   |
|  |   |            |                   | EKMF7-3240  | 32A   | 12A   |   |   |
|  |   |            | 4NC               | EKMF7-1604  | 16A   | 6A  |    |   |
|  |   |            |                   | EKMF7-2004  | 20A   | 7A  |   |   |
|  |   |            |                   | EKMF7-2504  | 25A   | 9A  |   |   |
|  |   |            |                   | EKMF7-3204  | 32A   | 12A   |   |   |
| 2NO+2NC  | EKMF7-1622  |            | 16A               | 6A  |  |   |   |   |
|  | EKMF7-2022  |            | 20A               | 7A  |   |   |   |   |
|  | EKMF7-2522  | 25A        | 9A                |   |   |   |   |   |
|  | EKMF7-3222  | 32A        | 12A               |   |   |   |   |   |
| 3NO+1NC  | EKMF7-1631  | 16A        | 6A                |  |   |   |   |   |
|  | EKMF7-2031  | 20A        | 7A                |   |   |   |   |   |
|  | EKMF7-2531  | 25A        | 9A                |   |   |   |   |   |
|  | EKMF7-3231  | 32A        | 12A               |   |   |   |   |   |
| <br>3 Modules | 12V AC/DC<br>24V AC/DC<br>48V AC/DC<br>110V AC/DC<br>230V AC/DC | 3P         | 3NO               | EKMF7-4030  | 40A   | 18A   |  |   |
|  |   |            |                   | EKMF7-6330  | 63A   | 25A   |   |   |
|  |   |            | 3NC               | EKMF7-4003  | 40A   | 18A   |  |   |
|  |   |            |                   | EKMF7-6303  | 63A   | 25A   |   |   |
|  |   |            | 4P                | 4NO   | EKMF7-4040  | 40A   | 18A   |  |
|  |   |            |                   |   | EKMF7-6340  | 63A   | 25A   |   |
|  |   | 4NC        |                   | EKMF7-4004  | 40A   | 18A   |  |   |
|  |   |            |                   | EKMF7-6304  | 63A   | 25A   |   |   |
|  |   | 2NO+2NC    |                   | EKMF7-4022  | 40A   | 18A   |  |   |
|  |   |            |                   | EKMF7-6322  | 63A   | 25A   |   |   |
|  |   | 3NO+1NC    | EKMF7-4031        | 40A   | 18A   |  |   |   |
|  |   |            | EKMF7-6331        | 63A   | 25A   |   |   |   |

### Modular Contactor Power Consumption

| Poles | Rated Current |       | Control voltage (VAC) | Power consumption |         | Max Power |
|-------|---------------|-------|-----------------------|-------------------|---------|-----------|
|       | AC-7a         | AC-7b |                       | Hold on           | Pull in |           |
| 2P    | 16A           | 6A    | 230                   | 2.1VA             | 2.1VA   | 2.0W      |
|       | 20A           | 7A    | 230                   | 2.1VA             | 2.1VA   | 2.0W      |
|       | 25A           | 9A    | 230                   | 2.1VA             | 2.1VA   | 2.0W      |
|       | 32A           | 12A   | 230                   | 2.1VA             | 2.1VA   | 2.0W      |
|       | 40A           | 18A   | 230                   | 2.3VA             | 2.3VA   | 2.0W      |
|       | 63A           | 25A   | 230                   | 2.3VA             | 2.3VA   | 2.0W      |
| 4P    | 16A           | 6A    | 230                   | 2.3VA             | 2.3VA   | 2.0W      |
|       | 20A           | 7A    | 230                   | 2.3VA             | 2.3VA   | 2.0W      |
|       | 25A           | 9A    | 230                   | 2.3VA             | 2.3VA   | 2.0W      |
|       | 32A           | 12A   | 230                   | 2.3VA             | 2.3VA   | 2.0W      |
|       | 40A           | 18A   | 230                   | 6.0VA             | 6.0VA   | 5.5W      |
|       | 63A           | 25A   | 230                   | 6.0VA             | 6.0VA   | 5.5W      |

### Modular Contactor Auxiliary

#### Auxiliary Contacts

The Auxiliary contacts are indicator contactor contacts status switch OFF or ON

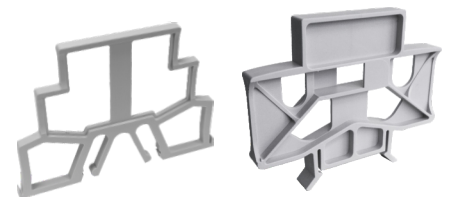
|            | AC-12 |      | AC-15 |      | DC-13   |      | Rated Current | Circuit Diagram |
|------------|-------|------|-------|------|---------|------|---------------|-----------------|
|            | C.V.  | C.A. | C.V.  | C.A. | C.V.    | C.A. |               |                 |
| EKMF-OF-11 | 240V  | 5A   | 230V  | 2A   | DC 130V | 1A   | 5A            |                 |
| EKMF-OF-20 | 240V  | 5A   | 230V  | 2A   | DC 130V | 1A   | 5A            |                 |



#### Spacing Piece

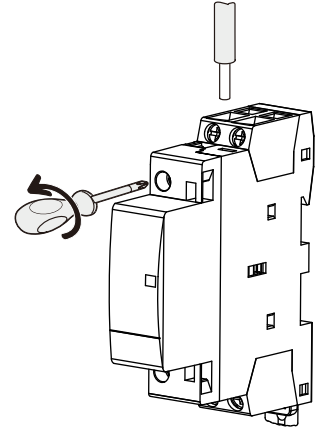
Spacers are used to reduce the temperature rise of devices mounted side by side. It is recommended to separate electronic equipment (temperature adjustment devices, programmable timer etc.) from electromechanical equipment (impulse relays, contactors)

|               | Technical specifications |
|---------------|--------------------------|
| Spacing piece | 3mm Spacing piece        |
|               | 9mm Spacing piece        |



### Connection Parameter

| Type    | Rated Current | Length tripping | Circuit | Tightening torque | Copper cables |  |  |
|---------|---------------|-----------------|---------|-------------------|---------------|--|--|
|         |               |                 |         |                   | Rigid         | Flexible or Ferrule                            |  |
| EKMF7   | PZ1: 4mm      | 16-63A          | 9mm     | Control           | 0.8N.m        | 1.5~2.5mm <sup>2</sup><br>2x1.5mm <sup>2</sup> | 1.5~2.5mm <sup>2</sup><br>2x2.5mm <sup>2</sup> |
|         |               | 16-32A          | 9mm     | Power             | 0.8N.m        | 1.5~6mm <sup>2</sup>                           | 1~4mm <sup>2</sup>                             |
|         | PZ2: 6mm      | 40-63A          | 14mm    | Power             | 3.5N.m        | 6~25mm <sup>2</sup>                            | 6~16mm <sup>2</sup>                            |
| EKMF-OF | PZ1: 4mm      | -               | 9mm     | -                 | 0.8N.m        | 1.5~2.5mm <sup>2</sup><br>2x1.5mm <sup>2</sup> | 1.5~2.5mm <sup>2</sup><br>2x2.5mm <sup>2</sup> |



### Overall and Installation Dimension(mm)

