

Table of specifications

MC type Magnetic contactors



| Frame size | | | 18AF | | | | 22AF | | | | |
|--|------------------------|-------------|--------------------------|-------|--------|--------|--------------------------|--------|--------|--------|-----|
| Type | Screws clamp terminals | | MC-6a | MC-9a | MC-12a | MC-18a | MC-9b | MC-12b | MC-18b | MC-22b | |
| | Lug clamp terminals | | ● | ● | ● | ● | ● | ● | ● | ● | |
| Number of poles | | | 3pole | | | | 3pole | | | | |
| Rated operational voltage, Ue | | | 690V | | | | 690V | | | | |
| Rated insulation voltage, Ui | | | 690V | | | | 690V | | | | |
| Rated frequency | | | 50/60Hz | | | | 50/60Hz | | | | |
| Rated impulse withstand voltage, Uimp | | | 6kV | | | | 6kV | | | | |
| Maximum operating rate in operating cycles per hour(AC3) | | | 1800 operations per hour | | | | 1800 operations per hour | | | | |
| Durability | Mechanical | | 15 mil. operations | | | | 15 mil. operations | | | | |
| | Electrical | | 2.5 mil. operations | | | | 2.5 mil. operations | | | | |
| Current and power | AC-1, Thermal current | A | 25 | 25 | 25 | 32 | 25 | 27 | 32 | 45 | |
| | AC-3 200/240V | kW | 2.2 | 2.5 | 3.5 | 4.5 | 2.5 | 3.5 | 4.5 | 5.5 | |
| | | A | 9 | 11 | 13 | 18 | 11 | 13 | 18 | 22 | |
| | 380/440V | kW | 3 | 4 | 5.5 | 7.5 | 4 | 5.5 | 7.5 | 11 | |
| | | A | 7 | 9 | 12 | 18 | 9 | 12 | 18 | 22 | |
| | 500/550V | kW | 3 | 4 | 7.5 | 7.5 | 4 | 7.5 | 7.5 | 15 | |
| | | A | 6 | 7 | 12 | 13 | 7 | 12 | 13 | 20 | |
| | 690V | kW | 3 | 4 | 7.5 | 7.5 | 4 | 7.5 | 7.5 | 15 | |
| | | A | 4 | 5 | 9 | 9 | 6 | 9 | 9 | 18 | |
| | 1000V | kW | - | - | - | - | - | - | - | - | |
| A | - | - | - | - | - | - | - | - | - | | |
| Rated Short-time withstand current (IEC 60947) | 1s | A | 210 | 250 | 280 | 300 | 250 | 280 | 300 | 400 | |
| | 10s | A | 105 | 110 | 120 | 130 | 110 | 120 | 154 | 186 | |
| | 30s | A | 70 | 70 | 80 | 85 | 70 | 80 | 100 | 130 | |
| | 1min | A | 61 | 61 | 61 | 70 | 61 | 61 | 84 | 90 | |
| | 3min | A | 40 | 45 | 47 | 50 | 45 | 50 | 60 | 60 | |
| | 10min | A | 30 | 30 | 30 | 40 | 30 | 30 | 40 | 50 | |
| | ≥ 15min | A | 25 | 26 | 28 | 30 | 26 | 28 | 30 | 45 | |
| UL rating (50/60Hz) | Continuous current | A | 25 | 25 | 25 | 32 | 25 | 25 | 40 | 40 | |
| | Single phase | 110-120V | HP | 0.5 | 0.5 | 0.75 | 1 | 0.5 | 0.75 | 1 | 2 |
| | | 220-240V | HP | 1.5 | 1.5 | 2 | 3 | 1.5 | 2 | 3 | 3 |
| | | 200-208V | HP | 2 | 2 | 3 | 7.5 | 2 | 3 | 7.5 | 7.5 |
| | Three phase | 220-240V | HP | 3 | 3 | 5 | 7.5 | 3 | 5 | 7.5 | 10 |
| | | 440-480V | HP | 5 | 5 | 7.5 | 10 | 5 | 7.5 | 10 | 15 |
| | | 550-600V | HP | 7.5 | 7.5 | 10 | 15 | 7.5 | 10 | 15 | 20 |
| | NEMA size | | 00 | 00 | 0 | 1 | 00 | 0 | 1 | | |
| Size and weight | AC control | Weight | 0.33 | | | | 0.34 | | | | |
| | | Size(W×H×D) | 45×73.5×80.4 | | | | 45×73.5×87.4 | | | | |
| | DC control | Weight | 0.4 | | | | 0.41 | | | | |
| | | Size(W×H×D) | 45×73.5×96.6 | | | | 45×73.5×103.6 | | | | |
| Auxiliary(standard) | | | 1a or 1b | | | | 1a1b | | | | |
| Auxiliary | Side mount | | UA-1 | | | | UA-1 | | | | |
| | Front mount | | UA-2, UA-4 | | | | UA-2, UA-4 | | | | |

Note) Minimum conduct current of Auxiliary contactor is DC 17V 5mA.

MT type Thermal Overload Relays



| Type | | | MT-12/□ | MT-32/□ |
|---------------------------------------|------------------------|----|--------------|----------|
| Type | screws clamp terminals | | ● | ● |
| | Lug clamp terminals | | | |
| Rated operational voltage, Ue | | | 690V | 690V |
| Rated insulation voltage, Ui | | | 690V | 690V |
| Rated impulse withstand voltage, Uimp | | | 6kV | 6kV |
| Trip class | | | 10A, 20 | 10A, 20 |
| Setting range | | | 0.1~18A | 0.1~40A |
| Size and weight | Weight | kg | 0.1 | 0.17 |
| | Size(W×H×D) | mm | 45×73.2×63.7 | 45×75×90 |

* The safety cover of magnetic contactor and thermal overload relay is optional.



| 40AF | |
|--------------------------|--------|
| MC-32a | MC-40a |
| • | • |
| | |
| 3pole | |
| 1000V | |
| 1000V | |
| 50/60Hz | |
| 8kV | |
| 1800 operations per hour | |
| 12 mil. operations | |
| 2 mil. operations | |
| 55 | 60 |
| 7.5 | 11 |
| 32 | 40 |
| 15 | 18.5 |
| 32 | 40 |
| 18.5 | 22 |
| 28 | 32 |
| 18.5 | 22 |
| 20 | 23 |
| 22 | 22 |
| 17 | 17 |
| 600 | 700 |
| 260 | 300 |
| 160 | 190 |
| 100 | 120 |
| 70 | 80 |
| 55 | 65 |
| 50 | 60 |
| 50 | 60 |
| 2 | 3 |
| 5 | 7.5 |
| 7.5 | 15 |
| 10 | 15 |
| 20 | 30 |
| 25 | 30 |
| 1P | 2 |
| 0.55 | |
| 69×83×90 | |
| 0.77 | |
| 69×83×117.1 | |
| 2a2b | |
| UA-1 | |
| UA-2, UA-4 | |



| 65AF | |
|--------------------------|--------|
| MC-50a | MC-65a |
| • | • |
| • | • |
| | |
| 3pole | |
| 1000V | |
| 1000V | |
| 50/60Hz | |
| 8kV | |
| 1200 operations per hour | |
| 12 mil. operations | |
| 2 mil. operations | |
| 100 | 115 |
| 15 | 18.5 |
| 55 | 65 |
| 22 | 30 |
| 50 | 65 |
| 30 | 33 |
| 43 | 60 |
| 30 | 33 |
| 28 | 35 |
| 30 | 30 |
| 23 | 23 |
| 1000 | 1050 |
| 550 | 700 |
| 330 | 380 |
| 250 | 270 |
| 150 | 200 |
| 90 | 120 |
| 87 | 96 |
| 70 | 100 |
| 3 | 5 |
| 10 | 15 |
| 20 | 25 |
| 25 | 30 |
| 40 | 50 |
| 50 | 60 |
| 1.05 | |
| 79×106×119 | |
| 1.3 | |
| 79×106×146.4 | |
| 2a2b | |
| UA-1 | |
| UA-2, UA-4 | |



| 100AF | | |
|--------------------------|--------------|-------------------|
| MC-75a | MC-85a | MC-100a |
| • | • | • |
| • | • | • |
| | | |
| 3pole | | |
| 1000V | | |
| 1000V | | |
| 50/60Hz | | |
| 8kV | | |
| 1200 operations per hour | | |
| 12 mil. operations | | |
| 2 mil. operations | | 1 mil. operations |
| 125 | 135 | 160 |
| 22 | 25 | 30 |
| 75 | 85 | 105 |
| 37 | 45 | 55 |
| 75 | 85 | 105 |
| 37 | 45 | 55 |
| 64 | 75 | 85 |
| 37 | 45 | 55 |
| 42 | 45 | 65 |
| 37 | 37 | 37 |
| 28 | 28 | 28 |
| 1100 | 1200 | 1320 |
| 750 | 800 | 900 |
| 400 | 450 | 500 |
| 300 | 350 | 400 |
| 220 | 270 | 270 |
| 140 | 170 | 180 |
| 114 | 150 | 160 |
| 110 | 135 | 160 |
| 5 | 7.5 | 10 |
| 15 | 15 | 20 |
| 25 | 30 | 30 |
| 30 | 40 | 40 |
| 50 | 60 | 75 |
| 60 | 75 | 75 |
| | 3 | |
| | 1.93 | |
| | 94×140×135.8 | |
| | 2.8 | |
| | 94×140×172.3 | |
| | 2a2b | |
| | UA-1 | |
| | UA-2, UA-4 | |



| MT-32/ □ |
|----------|
| • |
| |
| 690V |
| 690V |
| 6kV |
| 10A, 20 |
| 0.1~40A |
| 0.17 |
| 45×75×90 |



| MT-63/ □ |
|-----------|
| • |
| • |
| |
| 690V |
| 690V |
| 6kV |
| 10A, 20 |
| 4~65A |
| 0.31/0.33 |
| 55×81×100 |



| MT-95/ □ |
|-----------|
| • |
| • |
| |
| 690V |
| 690V |
| 6kV |
| 10A, 20 |
| 7~100A |
| 0.48/0.5 |
| 70×97×110 |

Table of specifications

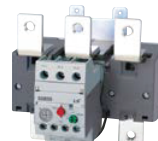
Metasol

MC type Magnetic contactors



| Frame size | | | 150AF | | 225AF | | 400AF | | | |
|--|------------------------|----------|--------------------------|------|----------------------------|------|----------------------------|------|---------------------|-----|
| Type | screws clamp terminals | | ● | ● | ● | ● | ● | ● | ● | |
| | Lug clamp terminals | | ● | ● | ● | ● | | | | |
| Number of poles | | | 3pole | | 3pole | | 3pole | | | |
| Rated operational voltage, Ue | | | 1000V | | 1000V | | 1000V | | | |
| Rated insulation voltage, Ui | | | 1000V | | 1000V | | 1000V | | | |
| Rated frequency | | | 50/60Hz | | 50/60Hz | | 50/60Hz | | | |
| Rated impulse withstand voltage, Uimp | | | 8kV | | 8kV | | 8kV | | | |
| Maximum operating rate in operating cycles per hour(AC3) | | | 1200 operations per hour | | 1200 operations per hour | | 1200 operations per hour | | | |
| Durability | Mechanical | | 5 mil. operations | | 5 mil. operations | | 5 mil. operations | | 2.5 mil. operations | |
| | Electrical | | 1 mil. operations | | 1 mil. operations | | 1 mil. operations | | 0.5 mil. operations | |
| Current and power | AC-1, Thermal current | A | 200 | 250 | 300 | 350 | 400 | 500 | 520 | |
| | | kW | 37 | 45 | 55 | 75 | 80 | 90 | 125 | |
| | AC-3 200/240V | A | 130 | 150 | 185 | 225 | 265 | 330 | 400 | |
| | | kW | 60 | 75 | 90 | 132 | 147 | 160 | 200 | |
| | 380/440V | A | 130 | 150 | 185 | 225 | 265 | 330 | 400 | |
| | | kW | 60 | 70 | 110 | 132 | 147 | 160 | 225 | |
| | 500/550V | A | 90 | 100 | 180 | 200 | 225 | 280 | 350 | |
| | | kW | 55 | 55 | 110 | 140 | 160 | 200 | 250 | |
| | 690V | A | 60 | 60 | 120 | 150 | 185 | 220 | 300 | |
| | | kW | 75 | 75 | 132 | 132 | 147 | 147 | 147 | |
| 1000V | A | 50 | 50 | 90 | 90 | 105 | 105 | 105 | | |
| Rated Short-time withstand current (IEC 60947) | 1s | A | 1350 | 1800 | 2000 | 2500 | 3500 | 4000 | 4600 | |
| | 10s | A | 950 | 1200 | 1500 | 1700 | 2400 | 3000 | 4400 | |
| | 30s | A | 700 | 800 | 1000 | 1200 | 1500 | 2500 | 2974 | |
| | 1min | A | 550 | 600 | 800 | 1000 | 1100 | 1700 | 1846 | |
| | 3min | A | 350 | 450 | 520 | 700 | 800 | 1000 | 1313 | |
| | 10min | A | 200 | 300 | 350 | 500 | 600 | 620 | 760 | |
| UL rating (50/60Hz) | Continuous current | A | 200 | 250 | 300 | 350 | 400 | 500 | 520 | |
| | | HP | 10 | 15 | 15 | 15 | - | - | - | |
| | Single phase | 110~120V | HP | 20 | 25 | 30 | 40 | - | - | - |
| | | 220~240V | HP | 40 | 40 | 60 | 60 | 75 | 100 | 125 |
| | Three phase | 220~240V | HP | 40 | 50 | 60 | 75 | 100 | 100 | 150 |
| | | 440~480V | HP | 75 | 100 | 125 | 150 | 200 | 200 | 300 |
| | 550~600V | HP | 75 | 75 | 125 | 150 | 200 | 200 | 300 | |
| NEMA size | | | | 4 | | | | | | |
| Size and weight | AC control | Weight | 2.4 | | 5.4 | | 9.2 | | | |
| | Size(W×H×D) | mm | 119×158×130.3 | | 138×203×185.1 | | 163×243×204.4 | | | |
| Auxiliary(standard) | DC control | Weight | | | | | | | | |
| | Size(W×H×D) | mm | | | | | | | | |
| Auxiliary | Side mount | | 2a2b | | 2a2b | | 2a2b | | | |
| | Front mount | | UA-1 | | AU-100, AU-100E (Max.4a4b) | | AU-100, AU-100E (Max.4a4b) | | | |
| | | | UA-2, UA-4 | | - | | - | | | |

MT type Thermal Overload Relays



| Type | | | MT150/□ | MT225/□ | MT400/□ |
|---------------------------------------|------------------------|----|------------|-------------|-------------|
| Type | screws clamp terminals | | ● | ● | ● |
| | Lug clamp terminals | | ● | ● | |
| Rated operational voltage, Ue | | | 690V | 690V | 690V |
| Rated insulation voltage, Ui | | | 690V | 690V | 690V |
| Rated impulse withstand voltage, Uimp | | | 6kV | 6kV | 6kV |
| Trip class | | | 10A, 20 | 10A, 20 | 10A, 20 |
| Setting range | | | 34~150A | 65~240A | 85~400A |
| Size and weight | Weight | kg | 0.67 | 2.5 | 2.6 |
| | Size(W×H×D) | mm | 95×109×113 | 147×141×184 | 151×171×198 |

* The safety cover of magnetic contactor and thermal overload relay is optional.

