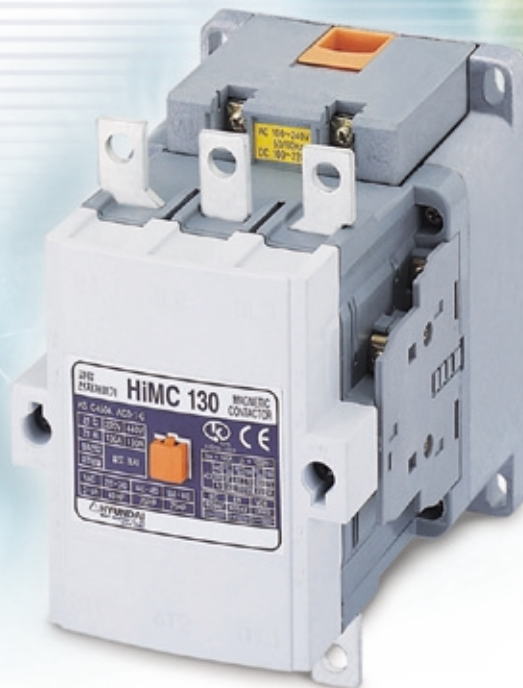


Innovative Technology

**Hi Series**

# Magnetic Contactor Thermal Overload Relay





# HiMC Series

## Reliability

**The HiMC Magnetic Contactor series employs a modular design which allows quick and simple mounting of auxiliary contact blocks, timers, mechanical latching blocks, etc. HiMC provides convenience, economic benefit and high reliability.**

## Solution

**Superior design for industrial applications such as motor control centers, the HiMC contactor is appropriate to various control systems, and favored by shipyard and power plant; where high reliability and performance are the criteria.**

### Contents

|    |                                               |
|----|-----------------------------------------------|
| 04 | HiMC Contactor[HiMC 9~800]                    |
| 06 | Technical Data of HiMC Contactor [HiMC 9~800] |
| 08 | Control Relay [HMX / HMT Series]              |
| 10 | Thermal Overload Relay [HiTH Selection Table] |



**Significantly extended mechanical and electrical life through increased contact capacity.**

**Noise-free operation through the use of new materials and DC control method.**

**Free voltage in control power using electronic circuits.**

**New model with high performance and reliability.**

**Innovative Technology**

# High Performance Magnetic Contactor



## Qualified Standards & Approvals

### ◆ Standards

- KS C4504
- IEC 60947
- EN 60947
- UL 508
- BS 47794, BS 5424, BS 4941
- VDE 0660
- Det Norske Veritas
- JISC 8328, JEM 1038

### ◆ Approvals

- UL / C-UL
- CE (Community European / TÜV Rheinland)
- ISO 14001, 9001

| TYPE     | CE | UL<br>C-UL | KR | LR | ABS | BV | NK | TYPE         | CE | UL<br>C-UL | KR | LR | ABS | BV | NK |
|----------|----|------------|----|----|-----|----|----|--------------|----|------------|----|----|-----|----|----|
| HiMC 9   | ●  | ●          | ●  | ●  | ●   | ●  | ●  | HMX          | ●  | ●          | ●  | ●  | ●   | ●  | ○  |
| HiMC 12  | ●  | ●          | ●  | ●  | ●   | ●  | ●  | HMT          | ●  | ●          | ●  | ●  | ●   | ●  | ○  |
| HiMC 18  | ●  | ●          | ●  | ●  | ●   | ●  | ●  | HiTH 22K(H)  | ●  | ○          | ●  | ○  | ●   | ●  | ○  |
| HiMC 22  | ●  | ●          | ●  | ●  | ●   | ●  | ●  | HiTH 40K(H)  | ●  | ○          | ●  | ○  | ●   | ●  | ○  |
| HiMC 32  | ●  | ●          | ●  | ●  | ●   | ●  | ●  | HiTH 50K(H)  | ●  | ○          | ●  | ○  | ●   | ●  | ○  |
| HiMC 40  | ●  | ●          | ●  | ●  | ●   | ●  | ●  | HiTH 90K(H)  | ●  | ○          | ●  | ○  | ●   | ●  | ○  |
| HiMC 50  | ●  | ●          | ●  | ●  | ●   | ●  | ●  | HiTH 130K(H) | ●  | ○          | ●  | ○  | ●   | ●  | ○  |
| HiMC 65  | ●  | ●          | ●  | ●  | ●   | ●  | ●  | HiTH 220K(H) | ●  | ○          | ●  | ○  | ●   | ●  | ○  |
| HiMC 80  | ●  | ●          | ●  | ●  | ●   | ●  | ●  | HiTH 300K(H) | ●  | ○          | ●  | ○  | ●   | ●  | ○  |
| HiMC 90  | ●  | ●          | ●  | ●  | ●   | ●  | ●  | HiTH 500K(H) | ●  | ○          | ●  | ○  | ●   | ●  | ○  |
| HiMC 110 | ●  | ●          | ●  | ●  | ●   | ●  | ●  | HiTH 800K(H) | ●  | ○          | ●  | ○  | ●   | ●  | ○  |
| HiMC 130 | ●  | ●          | ●  | ●  | ●   | ●  | ●  | HAB          | ●  | ●          | ○  | ○  | ●   | ●  | ○  |
| HiMC 150 | ●  | ●          | ●  | ●  | ●   | ●  | ●  | HAS          | ●  | ●          | ○  | ○  | ●   | ●  | ○  |
| HiMC 180 | ●  | ●          | ●  | ●  | ●   | ●  | ●  | HAC          | ●  | ●          | ○  | ○  | ●   | ●  | ○  |
| HiMC 220 | ●  | ●          | ●  | ●  | ●   | ●  | ●  | HiAL         | ●  | ●          | ○  | ○  | ●   | ●  | ○  |
| HiMC 260 | ●  | ●          | ●  | ●  | ●   | ●  | ●  | HiAR         | ●  | ●          | ○  | ○  | ●   | ●  | ○  |
| HiMC 300 | ●  | ●          | ●  | ●  | ●   | ●  | ●  |              |    |            |    |    |     |    |    |
| HiMC 400 | ●  | ●          | ●  | ●  | ●   | ●  | ●  |              |    |            |    |    |     |    |    |
| HiMC 500 | ●  | ●          | ●  | ●  | ●   | ●  | ●  |              |    |            |    |    |     |    |    |
| HiMC 630 | ●  | ○          | ●  | ●  | ●   | ●  | ●  |              |    |            |    |    |     |    |    |
| HiMC 800 | ●  | ○          | ●  | ●  | ●   | ●  | ●  |              |    |            |    |    |     |    |    |

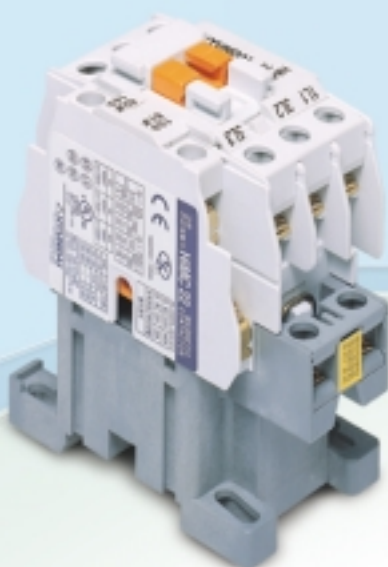
● Available ○ Testing ○ Not Applicable



## HiMC 9 ~ HiMC 50

### > Small Frame Size Contactor

- The electrical and mechanical lifetime of HiMC has been significantly extended.
- Both 50Hz and 60Hz are available.
- New materials prevent any generation of corroded substances, and the core enables noise-free status with the help of special anti-rust oil treatment.
- Various accessories can be attached easily.
- Terminal wiring is designed to meet IEC 60529 and protection degree of IP 20.
- By using clips, HiMC's coil can be replaced easily.



HiMC 22

**HiMC**

Hyundai  
innovative  
Magnetic  
Contactor

**22**

| Type | Ampere | Type | Ampere | Type | Ampere |
|------|--------|------|--------|------|--------|
| 9    | 9A     | 65   | 65A    | 220  | 220A   |
| 12   | 12A    | 80   | 80A    | 260  | 260A   |
| 18   | 18A    | 90   | 90A    | 300  | 300A   |
| 22   | 22A    | 110  | 110A   | 400  | 400A   |
| 32   | 32A    | 130  | 130A   | 500  | 500A   |
| 40   | 40A    | 150  | 150A   | 630  | 630A   |
| 50   | 50A    | 180  | 180A   | 800  | 800A   |

\* Rated Motor Output (AC3) at 380/440V

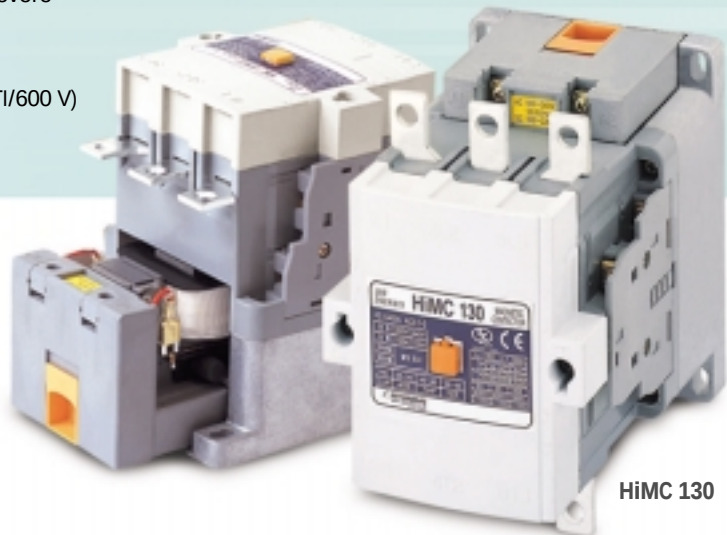
# HiMC Contactor

## HiMC 65 ~ HiMC 800

### > Large Frame Size Contactor

- The electrical and mechanical lifetime of HiMC has been significantly extended. The optimized design of the arc chamber minimizes contact erosion.
- HiMC contactor maintains noise-free operation through the DC-control method.
- Free voltage type HiMC contactor is available in both AC/DC and 50Hz/60Hz with an electronic circuit, which enables operation through severe voltage drop.
- HiMC contactors can be used in various environments by adopting special plastic(CTI/600 V) which has heat & waterproof characteristics.
- By adopting a cassette unit, the coil assembly can be replaced conveniently.
- As the cover of HiMC contactor can be easily opened, maintenance is very convenient.
- Two auxiliary contact blocks of 1NO+1NC can be attached to each side of HiMC, allowing auxiliary contacts to be added up to 4NO+4NC.

HiMC 130



HiMC 130

| W  |    |              | 22          |              | S                    |                   | / 220           |          | X     |      |
|----|----|--------------|-------------|--------------|----------------------|-------------------|-----------------|----------|-------|------|
| W  | G  | F            | 2           | 2            | Blank                | S                 | Control Voltage |          | Blank | X    |
| AC | DC | Free Voltage | Normal Open | Normal Close | Without Safety Cover | With Safety Cover | AC              | DC       | 60Hz  | 50Hz |
|    |    |              |             |              |                      |                   | 24V~690V        | 24V~220V |       |      |

\* Free Voltage Type is applied from HiMC 65 to HiMC 800

# HiMC Series



## HiMC 9 ~ HiMC 800

| TYPE              |                                   |                 | HiMC 9           | HiMC 12 | HiMC 18 | HiMC 22 | HiMC 32 | HiMC 40 | HiMC 50 | HiMC 65 | HiMC 80 |        |  |
|-------------------|-----------------------------------|-----------------|------------------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--|
| IEC 60947         | Rated Insulation Voltage          |                 | V                | 750     | 750     | 750     | 750     | 750     | 750     | 750     | 750     |        |  |
|                   | Rated Operational Voltage         |                 | V                | 690     | 690     | 690     | 690     | 690     | 690     | 690     | 690     |        |  |
|                   | AC1(Ith)                          |                 | A                | 20      | 20      | 25      | 32      | 50      | 50      | 70      | 100     | 110    |  |
|                   | AC3                               | 200-240 V       | kW/A             | 2.2/10  | 3.7/13  | 4.5/18  | 5.5/22  | 7.5/32  | 11/40   | 15/50   | 18.5/70 | 22/80  |  |
|                   |                                   | 380-440 V       |                  | 4/9     | 5.5/12  | 7.5/18  | 11/22   | 15/32   | 18.5/40 | 22/50   | 30/65   | 37/80  |  |
|                   |                                   | 500-550 V       |                  | 4/7     | 7.5/12  | 8.5/15  | 15/22   | 18.5/28 | 22/32   | 30/45   | 37/60   | 45/64  |  |
|                   |                                   | 660-690 V       |                  | 5.5/7   | 7.5/9   | 7.5/9   | 15/18   | 18.5/22 | 22/26   | 25/31   | 37/44   | 45/52  |  |
|                   |                                   | 1000 V          |                  | -       | -       | -       | -       | -       | -       | -       | -       | -      |  |
|                   |                                   | 200 V           | HP               | 2       | 3       | 5       | 5       | 10      | 10      | 15      | 20      | 25     |  |
|                   |                                   | 230 V           |                  | 2       | 3       | 5       | 7.5     | 10      | 10      | 15      | 20      | 30     |  |
|                   |                                   | 460 V           |                  | 5       | 7.5     | 10      | 15      | 20      | 30      | 40      | 50      | 60     |  |
|                   |                                   | 575 V           |                  | 7.5     | 10      | 15      | 20      | 25      | 30      | 40      | 50      | 60     |  |
|                   | AC4                               | 200-240 V       | A                | 8       | 11      | 15      | 18      | 22      | 25      | 35      | 50      | 55     |  |
|                   |                                   | 380-440 V       |                  | 6       | 9       | 9       | 13      | 17      | 24      | 32      | 47      | 52     |  |
|                   | Lifetime                          | Electrical(AC3) | x1,000           | 2,500   | 2,500   | 2,500   | 2,500   | 2,000   | 2,000   | 2,000   | 2,000   | 2,000  |  |
|                   |                                   | Mechanical      | x1,000           | 25,000  | 25,000  | 25,000  | 25,000  | 15,000  | 15,000  | 10,000  | 10,000  | 10,000 |  |
|                   | Operating Times<br>AC/DC          | Closing         | ms               | 15~25   |         |         |         |         | 15~25   |         | 14~25   | 50~65  |  |
|                   |                                   | Opening         | ms               | 4~15    |         |         |         |         | 4~15    |         | 4~15    | 25~90  |  |
|                   | Operating Frequency per hour(AC3) |                 | times            | 1000    | 1000    | 1000    | 1000    | 750     | 750     | 750     | 450     | 450    |  |
|                   | AC**<br>Making Capacity           | 220 VAC         | A                | 100     | 130     | 180     | 220     | 320     | 400     | 500     | 700     | 800    |  |
|                   |                                   | 480 VAC         |                  | 90      | 120     | 180     | 220     | 320     | 400     | 500     | 650     | 800    |  |
|                   | AC**<br>Breaking Capacity         | 220 VAC         | A                | 80      | 104     | 144     | 176     | 256     | 320     | 400     | 560     | 640    |  |
|                   |                                   | 480 VAC         |                  | 72      | 96      | 144     | 176     | 256     | 320     | 400     | 520     | 640    |  |
| UL508             | Continuous Current                |                 | A                | 20      | 20      | 25      | 32      | 45      | 50      | 65      | 80      | 90     |  |
|                   | Max. HP                           | 100-120 V       | 1-Ph             | 0.5/9.8 | 0.5/9.8 | 1/16    | 1.5/20  | 2/24    | 2/24    | 3/34    | -       | -      |  |
|                   |                                   | 220-240 V       | HP/A             | 1/8     | 1/8     | 3/17    | 3/17    | 5/28    | 5/28    | 7.5/40  | -       | -      |  |
|                   |                                   | 220-240 V       | 3-Ph             | 2/6.8   | 3/9.6   | 5/15.2  | 5/15.2  | 10/28   | 10/28   | 15/42   | 20/54   | 25/68  |  |
|                   | 440-480 V                         | HP/A            | 5/7.6            | 5/7.6   | 10/14   | 10/14   | 20/27   | 20/27   | 30/40   | 40/52   | 50/65   |        |  |
| NEMA              | Size                              |                 | 00               |         | 0       |         | 1       |         | 2       |         |         |        |  |
|                   | Max. HP                           | 115 V           | 1-Ph             | 0.33    |         | 1       |         | 2       |         | 3       |         |        |  |
|                   |                                   | 230 V           | HP               | 1       |         | 3       |         | 3       |         | 7.5     |         |        |  |
|                   |                                   | 200 V           | 3-Ph<br>HP       | 1.5     |         | 3       |         | 7.5     |         | 10      |         |        |  |
|                   |                                   | 230 V           |                  | 1.5     |         | 3       |         | 7.5     |         | 15      |         |        |  |
|                   |                                   | 460/575 V       |                  | 2       |         | 5       |         | 10      |         | 25      |         |        |  |
| Mounting Method   |                                   |                 | Screw & DIN-Rail |         |         |         |         |         |         | Screw   |         |        |  |
| Auxiliary Contact |                                   |                 | 1a1b             | 1a1b    | 1a1b    | 1a1b    | 2a2b    | 2a2b    | 2a2b*   | 2a2b    | 2a2b    |        |  |
| Weight            | AC                                | Kg              | 0.37             | 0.37    | 0.37    | 0.37    | 0.47    | 0.47    | 0.74    | 2.10    | 2.10    |        |  |
|                   | DC                                |                 | 0.68             | 0.68    | 0.68    | 0.68    | 0.77    | 0.77    | 0.77    | 2.15    | 2.15    |        |  |
|                   | A/DC                              |                 |                  |         |         |         |         |         |         | 2.23    | 2.23    |        |  |

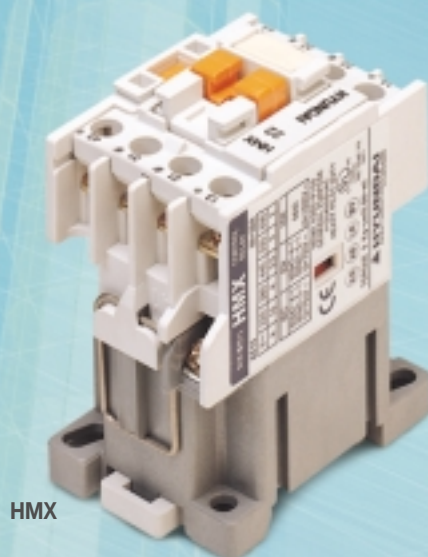
\* The auxiliary contact of HiMC 50 for DC is 2a1b.

\*\* AC making and AC breaking capacity are 50 operations.

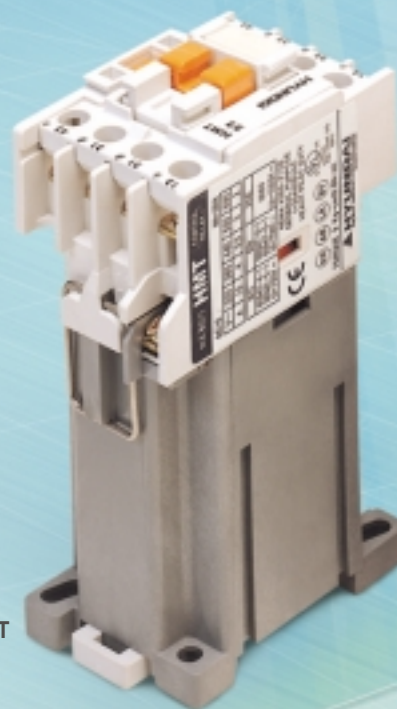
# Technical Data of HiMC Contactor

| HiMC 90 | HiMC 110 | HiMC 130 | HiMC 150 | HiMC 180 | HiMC 220 | HiMC 260 | HiMC 300 | HiMC 400 | HiMC 500 | HiMC 630 | HiMC 800 |
|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 750     | 1000     | 1000     | 1000     | 1000     | 1000     | 1000     | 1000     | 1000     | 1000     | 1000     | 1000     |
| 690     | 1000     | 1000     | 1000     | 1000     | 1000     | 1000     | 1000     | 1000     | 1000     | 1000     | 1000     |
| 135     | 150      | 160      | 200      | 230      | 260      | 300      | 350      | 450      | 550      | 750      | 900      |
| 25/90   | 30/110   | 37/130   | 45/150   | 55/180   | 63/220   | 75/260   | 90/300   | 125/400  | 140/500  | 190/630  | 220/800  |
| 45/90   | 55/110   | 65/130   | 75/150   | 90/180   | 110/220  | 132/260  | 160/300  | 220/400  | 250/500  | 330/630  | 440/800  |
| 50/80   | 60/110   | 70/120   | 90/140   | 110/180  | 132/200  | 150/220  | 160/273  | 220/350  | 300/426  | 330/500  | 500/720  |
| 50/60   | 55/65    | 60/70    | 90/100   | 110/120  | 132/150  | 160/173  | 200/220  | 250/300  | 335/360  | 400/412  | 500/630  |
| -       | 65/50    | 75/54    | 90/66    | 110/78   | 132/96   | 160/113  | 200/141  | 250/178  | 275/192  | 300/213  | 400/284  |
| 30      | 30       | 40       | 40       | 50       | 60       | 75       | 100      | 125      | 150      | 200      | 250      |
| 30      | 40       | 40       | 50       | 60       | 75       | 75       | 100      | 150      | 200      | 250      | 300      |
| 60      | 75       | 100      | 100      | 125      | 150      | 200      | 200      | 300      | 400      | 500      | 600      |
| 75      | 100      | 100      | 125      | 150      | 200      | 200      | 250      | 350      | 400      | 500      | 600      |
| 65      | 80       | 90       | 125      | 150      | 180      | 200      | 220      | 300      | 350      | 400      | 630      |
| 62      | 75       | 90       | 110      | 150      | 180      | 200      | 220      | 300      | 350      | 400      | 630      |
| 2,000   | 1,000    | 1,000    | 1,000    | 1,000    | 1,000    | 1,000    | 1,000    | 500      | 500      | 500      | 500      |
| 10,000  | 5,000    | 5,000    | 5,000    | 5,000    | 5,000    | 5,000    | 5,000    | 5,000    | 5,000    | 5,000    | 5,000    |
| 50~65   | 55~65    |          | 50~55    |          |          | 55~65    |          | 55~65    |          | 55~65    |          |
| 25~90   | 55~65    |          | 42~55    |          |          | 45~65    |          | 45~65    |          | 45~65    |          |
| 450     | 450      | 450      | 300      | 300      | 300      | 300      | 300      | 300      | 300      | 300      | 300      |
| 900     | 1100     | 1300     | 1500     | 1800     | 2200     | 2600     | 3000     | 4000     | 5000     | 6300     | 8000     |
| 900     | 1100     | 1300     | 1500     | 1800     | 2200     | 2600     | 3000     | 4000     | 5000     | 6300     | 8000     |
| 720     | 880      | 1040     | 1200     | 1440     | 1760     | 2080     | 2400     | 3200     | 4000     | 5040     | 6400     |
| 720     | 880      | 1040     | 1200     | 1440     | 1760     | 2080     | 2400     | 3200     | 4000     | 5040     | 6400     |
| 100     | 150      | 160      | 200      | 230      | 260      | 300      | 350      | 450      | 550      | 750      | 900      |
| -       | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        |
| -       | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        | -        |
| 30/80   | 30/80    | 40/104   | 50/130   | 60/154   | 75/192   | 75/192   | 100/248  | 125/312  | 150/360  | 250/480  | 300/720  |
| 50/65   | 60/77    | 75/96    | 100/124  | 125/156  | 150/180  | 150/180  | 200/240  | 250/302  | 250/302  | 500/477  | 600/708  |
| 3       |          |          | 4        |          |          |          | 5        |          |          | 6        | 7        |
| 7.5     |          |          | -        |          |          |          | -        |          |          | -        | -        |
| 15      |          |          | -        |          |          |          | -        |          |          | -        | -        |
| 25      |          |          | 40       |          |          |          | 75       |          |          | 150      | -        |
| 30      |          |          | 50       |          |          |          | 100      |          |          | 200      | 300      |
| 50      |          |          | 100      |          |          |          | 200      |          |          | 400      | 600      |
| Screw   |          |          |          |          |          |          |          |          |          |          |          |
| 2a2b    | 2a2b     | 2a2b     | 2a2b     | 2a2b     | 2a2b     | 2a2b     | 2a2b     | 2a2b     | 2a2b     | 2a2b     | 2a2b     |
| 2.10    | 2.95     | 2.95     | 5.45     | 5.45     | 5.45     | 7.05     | 7.05     | 14.50    | 14.50    | 26.55    | 26.55    |
| 2.15    | 3.00     | 3.00     | 5.60     | 5.60     | 5.60     | 7.20     | 7.20     | 14.60    | 14.60    | 26.55    | 26.55    |
| 2.23    | 3.23     | 3.23     | 5.67     | 5.67     | 5.67     | 7.40     | 7.40     | 14.60    | 14.60    | 27.55    | 27.55    |

## HMX / HMT Series



HMX



HMT

### > Ordering Information

| HMX           |  | 22                 |      |    | / | 220                 |  | X     |      |
|---------------|--|--------------------|------|----|---|---------------------|--|-------|------|
| Control Relay |  | Number of Contacts |      |    |   | Operational Voltage |  | Blank | X    |
| AC : HMX      |  | 22                 | 31   | 40 |   | AC 24 ~ 690V        |  | 60Hz  | 50Hz |
| DC : HMT      |  | 2a2b               | 3a1b | 4a |   | DC 24 ~ 220V        |  |       |      |

### > Auxiliary Block

| Applying Type | Aux. Contact Block | Contact Composition                     | Remark                      |
|---------------|--------------------|-----------------------------------------|-----------------------------|
| HMX / HMT     | HAC 13             | 1NO + 3NC<br>(2NO + 2NC)<br>(0NO + 4NC) | Default<br>Change<br>Change |
|               | HAC 40             | 4NO + 0NC                               |                             |
|               | HAC 11             | 1NO + 1NC                               |                             |
|               | HAC 02             | 0NO + 2NC                               |                             |
|               | HAC 20             | 2NO + 0NC                               |                             |



# Control Relay

## > HMX & HMT Series Features

- HMX is for AC, and HMT is for DC.
- The protection degree is IP20.
- Screw and 35 mm DIN-Rail mounting are available.
- Both HMX and HMT have three contact types. (2NO+2NC, 3NO+1NC and 4NO)
- These are proper for control circuit and factory automation.
- The following auxiliary blocks can be attached by one-touch method.
  - Aux. contact block
  - Timer
  - Latching Block
  - Surge absorber(RC-Unit)

## > Applicable Standard

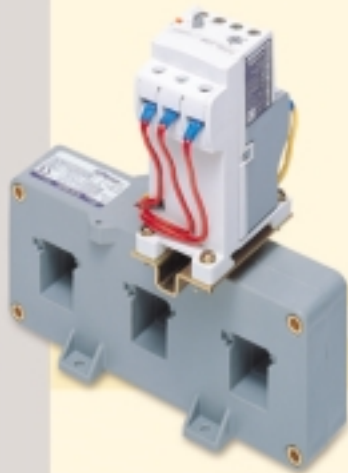
- IEC 60947-5-1
- UL 508
- VDE 0660
- CENELEC-EN 50011

## > Specification

|                                                    |                      |                 |                |
|----------------------------------------------------|----------------------|-----------------|----------------|
| Insulation class                                   | IEC 60947            | V               | 750            |
|                                                    | VDE 0660             | V               | 1000           |
| Thermal Current I <sub>th</sub> (AC1)              |                      | A               | 20             |
| Rated Operational Current<br>I <sub>e</sub> (AC15) | 220 V                | A               | 10             |
|                                                    | 380 V                |                 | 4              |
|                                                    | 440 V                |                 | 3.5            |
|                                                    | 500 V                |                 | 3              |
|                                                    | 600 V                |                 | 2              |
| Closing Time                                       | AC Operated          | ms              | 10 ~ 25        |
|                                                    | DC Operated          |                 | 20 ~ 50        |
| Opening Time                                       | AC Operated          | ms              | 5 ~ 20         |
|                                                    | DC Operated          |                 | 15 ~ 35        |
| Mechanical Lifetime                                |                      | 1,000 times     | 15,000         |
| Electrical Lifetime                                |                      | 1,000 times     | 500            |
| Wire Size                                          |                      | mm <sup>2</sup> | 2 x 0.75...2.5 |
| Operation Frequency                                |                      | Times/Hour      | 3000           |
| Applicable Max. Fuse                               | Plug-fuse(Fast/Slow) | A               | 35/25          |
|                                                    | MCB-C Features       |                 | 16             |
|                                                    | HRC Fuse(DIN/BS88)   |                 | 25             |

## > DC Breaking Current

|               |       |   |     |
|---------------|-------|---|-----|
| L / R = 15 ms | 60 V  | A | 80  |
|               | 110 V |   | 9   |
|               | 220 V |   | 1.5 |
| L / R = 40 ms | 60 V  | A | 67  |
|               | 110 V |   | 7   |
|               | 220 V |   | 0.8 |



HiTH 40K(H)



HiTH 50K(H)



HiTH 90K(H)

HiTH 130K(H)

## HiTH Selection Table

### > Technical Data / Specification

|                                  |                 | HiTH 22K(H)                | HiTH 40K(H)  | HiTH 50K(H) | HiTH 90K(H)  |
|----------------------------------|-----------------|----------------------------|--------------|-------------|--------------|
| Applicable Contactor             |                 | HiMC 9 ~ 22                | HiMC 32 ~ 40 | HiMC 50     | HiMC 65 ~ 90 |
| Rated Current Name               |                 | Allowable Scope of Current |              |             |              |
| 0.18                             |                 | 0.12 ~ 0.18                | -            | -           | -            |
| 0.26                             |                 | 0.18 ~ 0.26                | -            | -           | -            |
| 0.35                             |                 | 0.25 ~ 0.35                | -            | -           | -            |
| 0.5                              |                 | 0.34 ~ 0.5                 | -            | -           | -            |
| 0.7                              |                 | 0.5 ~ 0.7                  | -            | -           | -            |
| 0.9                              |                 | 0.6 ~ 0.9                  | -            | -           | -            |
| 1.2                              |                 | 0.8 ~ 1.2                  | -            | -           | -            |
| 1.6                              |                 | 1.1 ~ 1.6                  | -            | -           | -            |
| 2.1                              |                 | 1.5 ~ 2.1                  | -            | -           | -            |
| 3                                |                 | 2 ~ 3                      | -            | -           | -            |
| 4.2                              |                 | 2.8 ~ 4.2                  | -            | -           | -            |
| 5                                |                 | 3 ~ 5                      | -            | -           | -            |
| 6                                |                 | 4 ~ 6                      | -            | -           | -            |
| 8                                |                 | 5.6 ~ 8                    | -            | -           | -            |
| 10                               |                 | 7 ~ 10                     | 7 ~ 10       | -           | -            |
| 13                               |                 | 9 ~ 13                     | 9 ~ 13       | -           | -            |
| 18                               |                 | 12 ~ 18                    | 12 ~ 18      | -           | -            |
| 22                               |                 | 16 ~ 22                    | 16 ~ 22      | -           | -            |
| 26                               |                 | -                          | 18 ~ 26      | 18 ~ 26     | -            |
| 32                               |                 | -                          | 24 ~ 32      | 24 ~ 32     | -            |
| 40                               |                 | -                          | 28 ~ 40      | 28 ~ 40     | 28 ~ 40      |
| 50                               |                 | -                          | -            | 36 ~ 50     | 36 ~ 50      |
| 65                               |                 | -                          | -            | -           | 45 ~ 65      |
| 80                               |                 | -                          | -            | -           | 60 ~ 80      |
| 90                               |                 | -                          | -            | -           | 70 ~ 90      |
| Element Number                   | 2 Heaters       | H type (Option)            |              |             |              |
|                                  | 3 Heaters       | K type (Standard)          |              |             |              |
| Aux. Contact                     |                 | 1a1b                       |              |             |              |
| Reset Type                       |                 | Manual / Automatic reset   |              |             |              |
| Phase Fault Protection           |                 | K type Only (Standard)     |              |             |              |
| Suitable Wire (mm <sup>2</sup> ) | Main Circuit    | 1 ~ 6                      | 2 ~ 14       | 2 ~ 22      | 2 ~ 35       |
|                                  | Control Circuit | 2 × 0.75 ~ 2.5             |              |             |              |
| Weight (Kg) ※<br>K type / H type |                 | 0.17 / 0.16                | 0.23 / 0.22  | 0.28 / 0.27 | 0.53 / 0.51  |

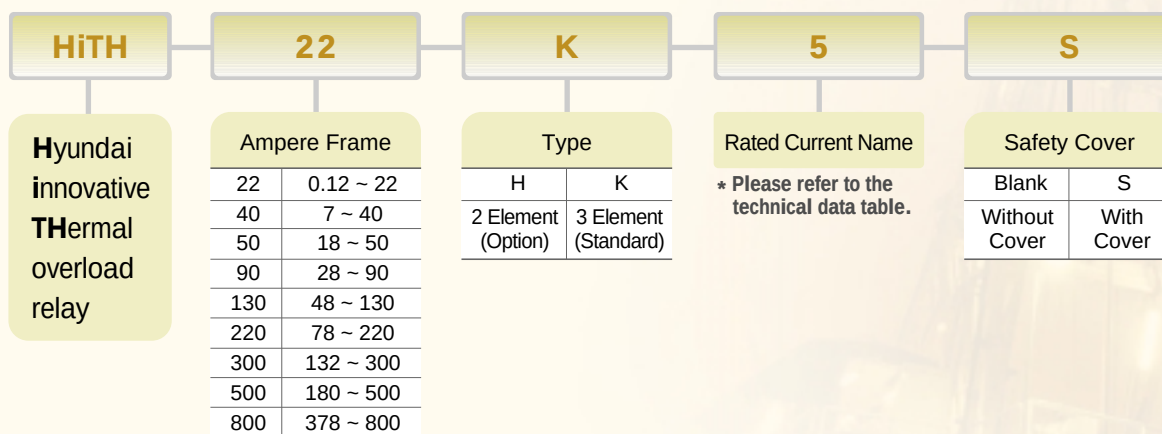
※ Net Weight.

# Thermal Overload Relay

|                                 |                 | HiTH 130K(H)               | HiTH 220K(H)   | HiTH 300K(H)   | HiTH 500K(H)   | HiTH 800K(H)   |
|---------------------------------|-----------------|----------------------------|----------------|----------------|----------------|----------------|
| Applicable Contactor            |                 | HiMC 110 ~ 130             | HiMC 150 ~ 220 | HiMC 260 ~ 300 | HiMC 400 ~ 500 | HiMC 630 ~ 800 |
| Rated Current Name              |                 | Allowable Scope of Current |                |                |                |                |
| 80 (CT Ratio - 80 : 5)          |                 | 48 ~ 80                    | -              | -              | -              | -              |
| 130 (CT Ratio - 130 : 5)        |                 | 78 ~ 130                   | 78 ~ 130       | -              | -              | -              |
| 180 (CT Ratio - 180 : 5)        |                 | -                          | 108 ~ 180      | -              | -              | -              |
| 220 (CT Ratio - 220 : 5)        |                 | -                          | 132 ~ 220      | 132 ~ 220      | -              | -              |
| 300 (CT Ratio - 300 : 5)        |                 | -                          | -              | 180 ~ 300      | 180 ~ 300      | -              |
| 400 (CT Ratio - 400 : 5)        |                 | -                          | -              | -              | 240 ~ 400      | -              |
| 500 (CT Ratio - 500 : 5)        |                 | -                          | -              | -              | 300 ~ 500      | -              |
| 630 (CT Ratio - 630 : 5)        |                 | -                          | -              | -              | -              | 378 ~ 630      |
| 800 (CT Ratio - 800 : 5)        |                 | -                          | -              | -              | -              | 480 ~ 800      |
| Features                        |                 | CT Assembly                |                |                |                |                |
| Element Number                  | 2 Element       | H type (Option)            |                |                |                |                |
|                                 | 3 Element       | K type (Standard)          |                |                |                |                |
| Aux. Contact                    |                 | 1a1b                       |                |                |                |                |
| Reset Type                      |                 | Manual / Automatic reset   |                |                |                |                |
| Phase Fault Protection          |                 | K type Only (Standard)     |                |                |                |                |
| Suitable Wire (mm²)             | Main Circuit    | -                          | -              | -              | -              | -              |
|                                 | Control Circuit | 2 × 0.75 ~ 2.5             |                |                |                |                |
| Weight (Kg)※<br>K type / H type |                 | 1.65 / 1.3                 | 1.85 / 1.49    | 1.94 / 1.59    | 2.25 / 1.88    | 5.74 / 4.62    |

※ Net Weight.

## > Ordering Information



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