

HF8565

MOTOR START POTENTIAL RELAY



File No.:SA13318



Features

- 50A switching capability
- 1 Form B configuration available
- 250" quick connect termination
- UL insulation system: Class F
- Various of mounting positions
- Environmental friendly product (RoHS compliant)
- Outline Dimensions: (51.2 x 46.6 x 36.5) mm

CONTACT DATA

| | |
|----------------------------|--|
| Contact arrangement | 1B |
| Contact resistance | 100mΩ max.(at 1A 24VDC) |
| Contact material | Silver alloy |
| Contact rating (Res. load) | 16A(make and break) 400VAC COS Ø=0.85 35A(break only) 400VAC COS Ø=0.85 50A(break only) 400VAC COS Ø=0.85 |
| Mechanical endurance | 7.5 x 10 ⁵ OPS |
| Electrical endurance | SPST-NC: 5 x 10 ⁵ OPS (16A on and off 400VAC cosØ=0.7-0.8 at 25°C 1s on 9s off) SPST-NC: 2 x 10 ⁵ OPS (35A only off 400VAC cosØ=0.7-0.8 at 25°C 1s on 9s off) SPST-NC: 1 x 10 ⁵ OPS (50A only off 400VAC cosØ=0.7-0.8 at 25°C 1s on 9s off) |

CHARACTERISTICS

| | |
|--------------|----------------|
| Weight | Approx. 110g |
| Termination | QC |
| Construction | Dust protected |

Notes: The data shown above are initial values.

COIL

| | |
|-------------------|-----------------|
| Coil power | Approx. 5VA |
| Coil voltage | See table below |
| Coil resistance | See table below |
| Insulation system | Class B |

OPERATING CHARACTERISTICS at 50Hz

| Coil number | 2 | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | | 9 | | |
|------------------------------|---------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|---------|-------|---------|--------|---------|-------|
| Vmax at 40°C (V) | 299 | | 338 | | 378 | | 356 | | 452 | | 151 | | 530 | | 228 | | |
| Resistance (1±10%) Ω at 25°C | 5600 | | 7500 | | 10700 | | 10000 | | 13800 | | 1500 | | 19500 | | 3900 | | |
| | H.P.U. | P.U. | D.O. | P.U. | D.O. | P.U. | D.O. | P.U. | D.O. | P.U. | D.O. | P.U. | D.O. | P.U. | D.O. | P.U. | D.O. |
| A | 120-130 | | | | | | | | | | | 111-124 | 20-45 | | | 111-124 | 35-77 |
| B | 130-140 | | | | | | | | | | | 120-134 | 20-45 | | | 120-134 | 35-77 |
| C | 150-160 | 140-153 | 40-90 | | | | | | | | | 130-144 | 20-45 | | | 130-144 | 35-77 |
| D | 160-170 | 150-163 | 40-90 | 150-163 | 40-90 | | | | | | | 140-153 | 20-45 | | | 140-153 | 35-77 |
| E | 170-180 | 162-175 | 40-90 | 162-175 | 40-90 | | | | | | | | | | | 149-163 | 35-77 |
| F | 180-190 | 171-184 | 40-90 | 171-184 | 40-90 | | | 180-195 | 40-105 | | | | | | | 157-172 | 35-77 |
| G | 190-200 | 180-193 | 40-90 | 180-195 | 40-105 | 180-195 | 40-105 | 189-205 | 40-105 | | | | | | | 168-182 | 35-77 |
| H | 200-220 | 186-215 | 40-90 | 190-215 | 40-105 | 195-224 | 50-110 | 186-214 | 60-133 | | | | | | | 178-192 | 35-77 |
| I | 220-240 | 205-234 | 40-105 | 208-239 | 50-110 | 204-233 | 50-110 | 204-233 | 60-133 | | | | | | | 183-213 | 35-77 |
| L | 240-260 | 224-252 | 40-105 | 224-252 | 50-110 | 223-259 | 50-110 | 223-252 | 60-133 | 223-252 | 60-130 | | | | | 203-231 | 35-77 |
| M | 260-280 | 243-271 | 40-105 | 239-270 | 50-110 | 242-272 | 50-110 | 242-272 | 60-133 | 239-268 | 60-135 | | | 239-268 | 75-170 | | |
| N | 280-300 | | | 260-289 | 50-110 | 262-290 | 60-121 | 262-290 | 60-133 | 258-287 | 60-135 | | | 258-287 | 75-170 | | |
| O | 300-320 | | | | | 280-310 | 60-121 | 280-310 | 60-133 | 277-305 | 60-135 | | | 277-305 | 75-170 | | |
| P | 320-340 | | | | | 300-328 | 60-121 | 300-328 | 60-154 | 295-324 | 60-135 | | | 295-324 | 75-170 | | |
| Q | 340-360 | | | | | 318-347 | 60-121 | | | 314-342 | 60-135 | | | 314-342 | 75-180 | | |
| R | 350-370 | | | | | | | | | | | | | 323-352 | 75-180 | | |
| S | 360-380 | | | | | | | | | | | | | 332-361 | 75-180 | | |

Notes: H.P.U.means Approximate pick-up value at 90°C , P.U. means pick-up value at 25°C, D.O.means drop out value at 25°C.



HONGFA RELAY

ISO9001, ISO/TS16949, ISO14001, OHSAS18001, IECQ QC 080000 CERTIFIED

2017 Rev. 1.00

OPERATING CHARACTERISTICS at 60Hz

| Coil number | 2 | | 3 | | 4 | | 5 | | 6 | | 7 | | 8 | | 9 | | |
|--------------------------------|---------|---------|--------|---------|--------|---------|--------|---------|--------|---------|--------|---------|---------|--------|------|---------|-------|
| V _{max} at 40°C (V) | 332 | | 375 | | 420 | | 395 | | 502 | | 168 | | 588 | | 253 | | |
| Resistance (1 ± 10%) Ω at 25°C | 5600 | | 7500 | | 10700 | | 10000 | | 13800 | | 1500 | | 19500 | | 3900 | | |
| | H.P.U. | P.U. | D.O. | P.U. | D.O. | P.U. | D.O. | P.U. | D.O. | P.U. | D.O. | P.U. | D.O. | P.U. | D.O. | P.U. | D.O. |
| AA | 120-130 | | | | | | | | | | | 111-124 | 20-45 | | | 111-124 | 35-77 |
| AB | 130-140 | | | | | | | | | | | 120-134 | 20-45 | | | 120-134 | 35-77 |
| AC | 150-160 | | | | | | | | | | | 130-144 | 20-45 | | | 130-144 | 35-77 |
| AD | 160-170 | 150-163 | 40-90 | | | | | | | | | 140-153 | 20-45 | | | 140-153 | 35-77 |
| AE | 170-180 | 162-175 | 40-90 | | | | | | | | | 149-163 | 20-45 | | | 149-163 | 35-77 |
| AF | 180-190 | 171-184 | 40-90 | | | | | 180-195 | 40-105 | | | | | | | 157-172 | 35-77 |
| AG | 190-200 | 180-193 | 40-90 | 180-195 | 40-105 | | | 189-205 | 40-105 | | | | | | | 168-182 | 35-77 |
| AH | 200-220 | 186-215 | 40-90 | 190-215 | 40-105 | 195-224 | 60-121 | 186-214 | 60-130 | | | | | | | 178-192 | 35-77 |
| AI | 220-240 | 205-234 | 40-90 | 208-239 | 50-110 | 204-233 | 60-121 | 204-233 | 60-130 | | | | | | | 183-213 | 35-77 |
| AL | 240-260 | 224-252 | 40-105 | 224-252 | 50-110 | 223-259 | 60-121 | 223-252 | 60-130 | | | | | | | 203-231 | 35-77 |
| AM | 260-280 | 243-271 | 40-105 | 239-270 | 50-110 | 242-272 | 60-121 | 242-272 | 60-140 | 239-268 | 60-135 | | | | | 221-250 | 35-77 |
| AN | 280-300 | | | 260-289 | 50-110 | 262-290 | 60-121 | 262-290 | 60-140 | 258-287 | 60-135 | | 258-287 | 75-170 | | | |
| AO | 300-320 | | | | | 280-310 | 60-121 | 280-310 | 60-140 | 277-305 | 60-135 | | 277-305 | 75-170 | | | |
| AP | 320-340 | | | | | 300-328 | 60-121 | 300-328 | 60-140 | 295-324 | 60-135 | | 295-324 | 75-170 | | | |
| AQ | 340-360 | | | | | 318-347 | 60-121 | | | 314-342 | 60-135 | | 314-342 | 75-180 | | | |
| AR | 350-370 | | | | | | | | | | | | 323-352 | 75-180 | | | |
| AS | 360-380 | | | | | | | | | | | | 332-361 | 75-180 | | | |

Notes: H.P.U.means Approximate pick-up value at 90°C , P.U. means pick-up value at 25°C, D.O.means drop out value at 25°C.

OPERATING POSITION

| | 1 | 2 | 3 | 4 | 5 | 6 |
|-------------------|---|---|---|---|---|---|
| PLASTIC TAB MOUNT | | | | | | |
| PANEL MOUNT | | | | | | |
| METAL TAB MOUNT | | | | | | |

TERMINAL CONFIGURATION

| | | |
|-------------------|--|----------------------|
| | | 3 dual QC (#1, 2, 5) |
| PLASTIC TAB MOUNT | | D |
| PANEL MOUNT | | P |
| METAL TAB MOUNT | | Z |

ORDERING INFORMATION

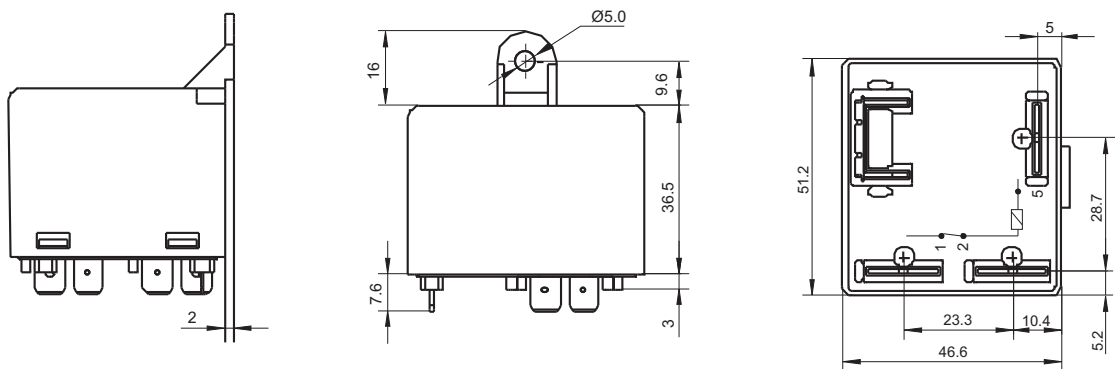
| | | | | | |
|----------------------------|--|---------------|---|---|---------|
| Type | HF8565 / | D | 6 | A | 1 (XXX) |
| Terminal configuration | D、P、Z (See table for terminal configuration) | | | | |
| Coil number | 2、3、4、5、6、7、8、9 | | | | |
| Operation characteristics | AA to AS (See table for operating characteristics) | | | | |
| Operation position | 1、2、3、4、5、6 | | | | |
| Special code ¹⁾ | XXX: Customer special requirement | Nil: Standard | | | |

Notes: 1) The customer special requirement express as special code after evaluating by Hongfa.

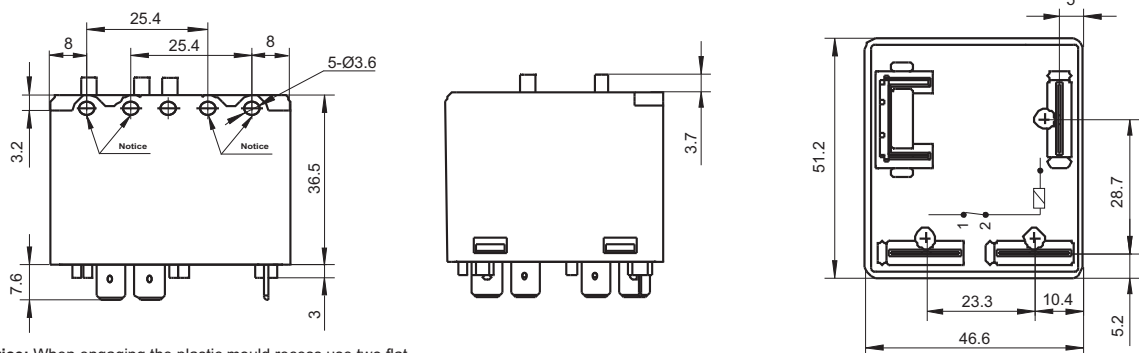
OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

Plastic Tab Mount

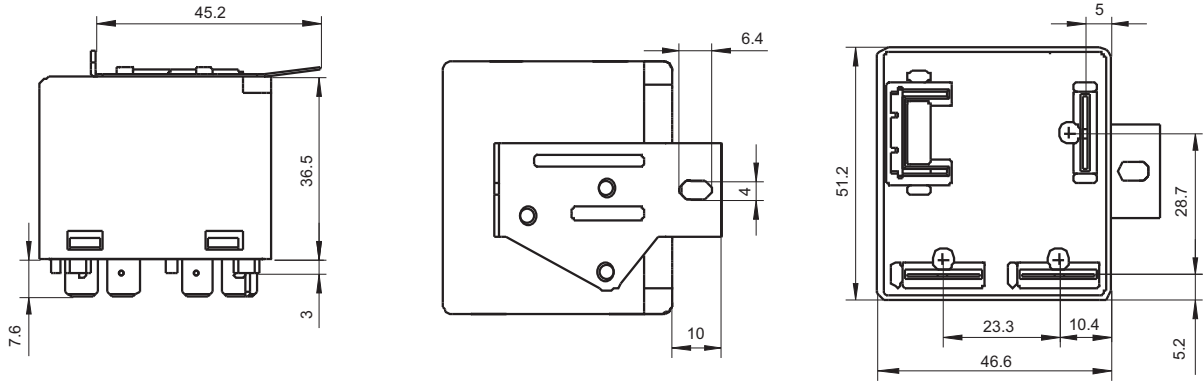


Panel Mount



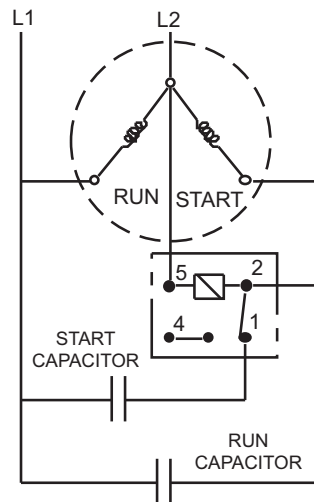
Notice: When engaging the plastic mould recess, use two flat head, self tapping screw, size 4.2mm, 9.5mm long.

Metal Tab Mount



Remark: In case of no tolerance shown in outline dimension: outline dimension ≤ 1 mm, tolerance should be ± 0.2 mm; outline dimension > 1 mm and ≤ 5 mm, tolerance should be ± 0.3 mm; outline dimension > 5 mm, tolerance should be ± 0.4 mm.

Wiring Diagram



Disclaimer

The specification is for reference only. See to "Terminology and Guidelines" for more information. Specifications subject to change without notice. We could not evaluate all the performance and all the parameters for every possible application. Thus the user should be in a right position to choose the suitable product for their own application. If there is any query, please contact Hongfa for the technical service. However, it is the user's responsibility to determine which product should be used only.