

# 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

### 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	$7.5 \times 10^5$ OPS
Electrical endurance	SPST-NC: $5 \times 10^5$ OPS (16A on and off 400VAC cosØ=0.7-0.8 at 25°C 1s on 9s off) SPST-NC: $2 \times 10^5$ OPS (35A only off 400VAC cosØ=0.7-0.8 at 25°C 1s on 9s off) SPST-NC: $1 \times 10^5$ 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 ( $\pm 10\%$ ) 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.
A	120-130							111-124	20-45
B	130-140							120-134	20-45
C	150-160	140-153	40-90					130-144	20-45
D	160-170	150-163	40-90	150-163	40-90			140-153	20-45
E	170-180	162-175	40-90	162-175	40-90				149-163
F	180-190	171-184	40-90	171-184	40-90	180-195	40-105		157-172
G	190-200	180-193	40-90	180-195	40-105	180-195	40-105	189-205	40-105
H	200-220	186-215	40-90	190-215	40-105	195-224	50-110	186-214	60-133
I	220-240	205-234	40-105	208-239	50-110	204-233	50-110	204-233	60-133
L	240-260	224-252	40-105	224-252	50-110	223-259	50-110	223-252	60-130
M	260-280	243-271	40-105	239-270	50-110	242-272	50-110	242-272	60-133
N	280-300			260-289	50-110	262-290	60-121	262-290	60-133
O	300-320				280-310	60-121	280-310	60-133	258-287
P	320-340				300-328	60-121	300-328	60-154	277-305
Q	340-360				318-347	60-121		314-342	60-135
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, IATF16949, ISO14001, ISO45001, IECQ QC 080000, ISO/IEC 27001 CERTIFIED

2019 Rev. 1.00

## OPERATING CHARACTERISTICS at 60Hz

Coil number	2		3		4		5		6		7		8		9	
Vmax 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.	
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

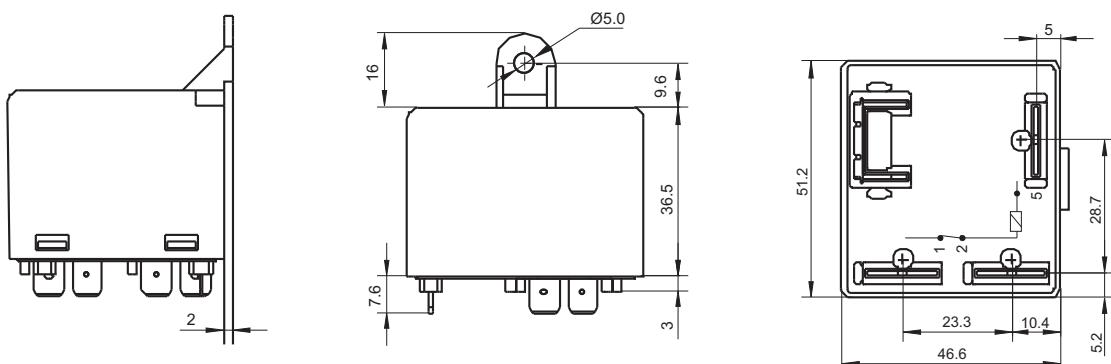
Type	HF8565 /	D	6	A	1	(XXX)
<b>Terminal configuration</b> D、P、Z(See table for terminal configuration)						
<b>Coil number</b> 2、3、4、5、6、7、8、9						
<b>Operation characteristics</b> AA to AS (See table for operating characteristics)						
<b>Operation position</b> 1、2、3、4、5、6						
<b>Special code<sup>1)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

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

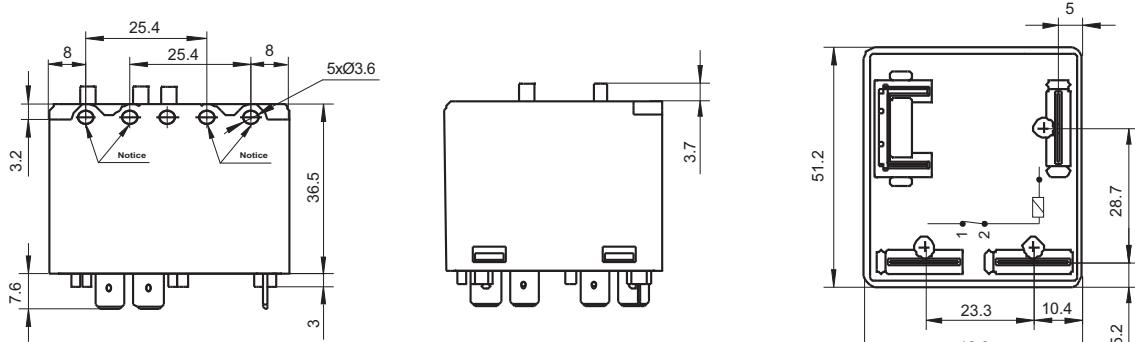
## OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

Plastic Tab Mount



Panel Mount

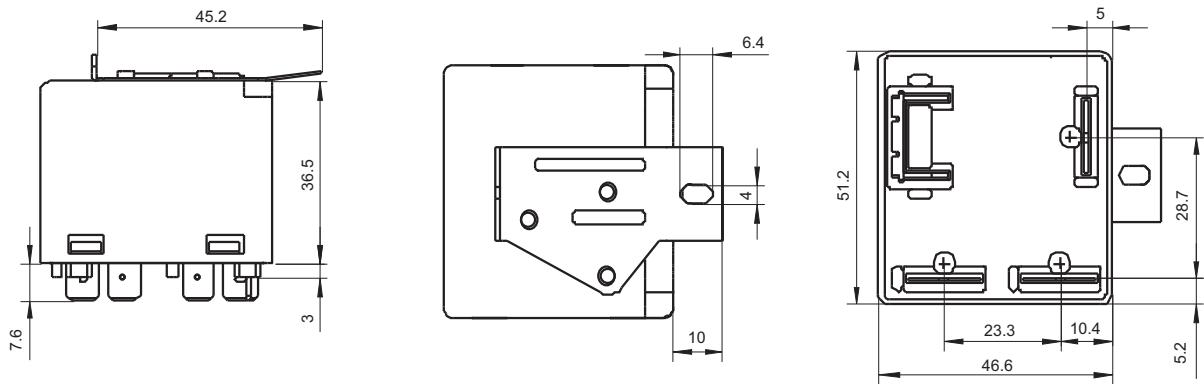


**Notice:** When engaging the plastic mould recess,use two flat head,self tapping screw,size 4.2mm,9.5mm long.

## OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

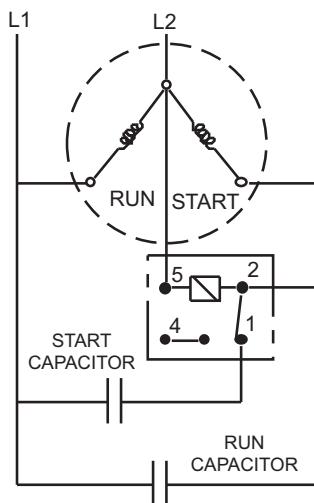
Unit: mm

Metal Tab Mount



Remark: In case of no tolerance shown in outline dimension: outline dimension  $\leq 1\text{mm}$ , tolerance should be  $\pm 0.2\text{mm}$ ; outline dimension  $> 1\text{mm}$  and  $\leq 5\text{mm}$ , tolerance should be  $\pm 0.3\text{mm}$ ; outline dimension  $> 5\text{mm}$ , tolerance should be  $\pm 0.4\text{mm}$ .

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.

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