

# HF8565

# MOTOR START POTENTIAL RELAY



### Features

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

### CONTACT DATA

Contact arrangement	1B
Contact resistance	100mΩ (at 1A 24VDC)
Contact material	AgCdO
Contact rating (Res. load)	16A(make and break) 400VAC COS φ=0.85 35A(break only) 400VAC COS φ=0.85 50A(break only) 400VAC COS φ=0.85
Mechanical endurance	7.5 x 10 <sup>5</sup> OPS 5 x 10 <sup>5</sup> OPS (16A 400VAC)
Electrical endurance	2 x 10 <sup>5</sup> OPS (35A 400VAC break only) 1 x 10 <sup>5</sup> OPS (50A 400VAC break only)

### CHARACTERISTICS

Weight	Approx. 110g
Termination	QC
Construction	Dust protected

Notes: The data shown above are initial values.

### COIL

Coil power	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		
V <sub>max</sub> at 40°C (V)	299		338		378		356		452		151		530		228		
Resistance (1±10%) Ω 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 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 CERTIFIED

2007 Rev. 2.00

## OPERATING CHARACTERISTICS at 60Hz

Coil number	2		3		4		5		6		7		8		9		
V <sub>max</sub> at 40°C (V)	332		375		420		395		502		168		588		253		
Resistance (Ω ±10%) 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 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

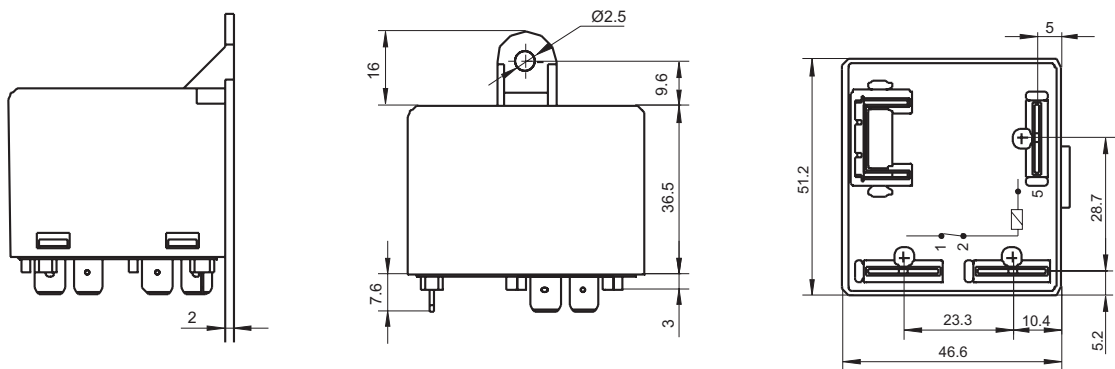
Type	HF8565 /	D	6	A	1 (XXX)
Terminal configuration	D、P、Z (See table for terminal configuration)				
Coil number	2、3、4、5、6、7、8、9				
Operation characteristics	AA~AS (See table for operating characteristics)				
Operation position	1、2、3、4、5、6				
Customer special code <sup>1)</sup>	Only for special requirements, e.g. (551) stands for RoHS compliant (Cadmium containing contacts)				

Notes: 1) HF8565 is an environmental friendly product. Please mark a special code (551) when ordering.

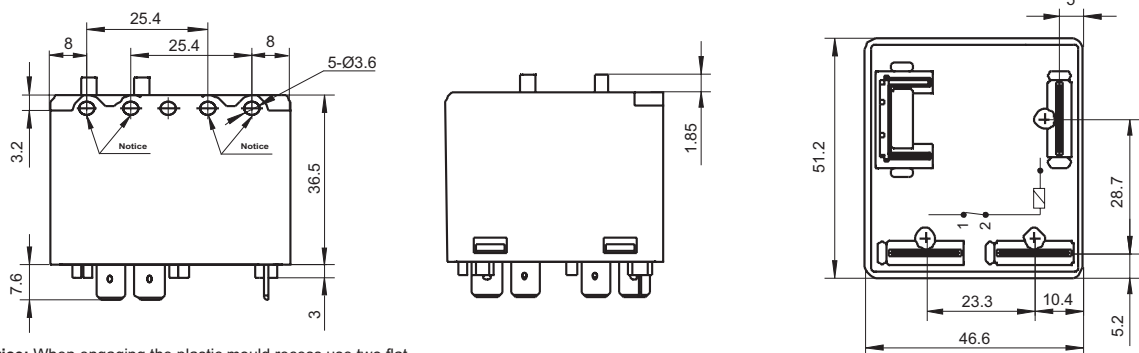
## OUTLINE DIMENSIONS, WIRING DIAGRAM AND PC BOARD LAYOUT

Unit: mm

### Plastic Tab Mount

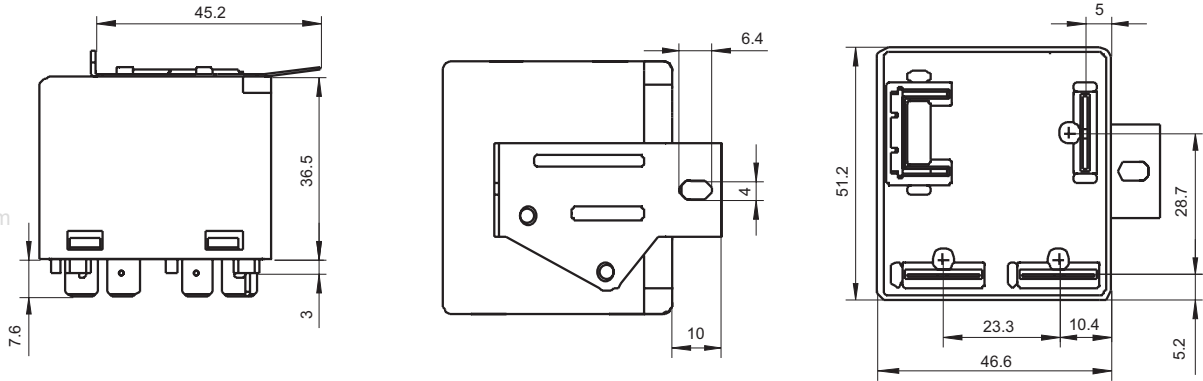


### Panel Mount



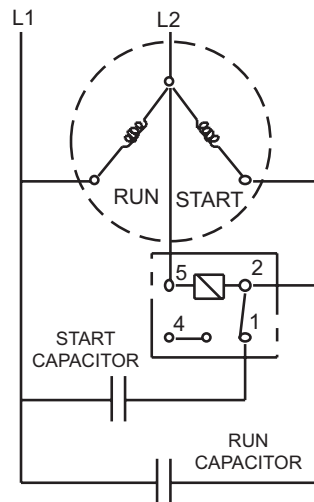
Notice: When engaging the plastic mould recess, use two flat head, self tapping screw, size 4.2mm, 9.5mm long.

Metal Tab Mount



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

Wiring Diagram



Disclaimer

This datasheet is for the customers' reference. All the specifications are 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.