技术参数 Specifications

电气参数 Ratings:

- ◇最大工作电压
 - Max. Switching Voltage: 2500VDC
- ◇额定电流 Rated Current: 600A
- ◆主触点形式

Main Contact Type: 一组常开 SPST-NO

- ◇辅助触点 Auxiliary Contact: 可选配 Optional
- ◇辅助触点形式 Auxiliary Contact Type: 一组常开 SPST-NO
- ◇线圈额定电压
- Coil Rated Voltage : 12VDC/24VDC/48VDC
- ◇使用环境温度 Ambient Operation Temperature : -40°C~+85°C
- ◇使用环境湿度 Ambient Operation Humidity : 5%~85%RH

认证/标准 Approvals/Standard:

◇REACH

◇RoHS

产品特征 Features&Benefits:

陶瓷密封结构, 腔内充有氢气混合气体, 无电弧泄露风险, 接触电阻低且稳定; Ceramic sealing structure with H₂ mixed gas filled in the chamber, no risk of arc leakage, low&stable contact resistance;

良好的抗短路能力,确保通过短路电流,触头仍能可靠闭合不斥开,产品不起火不爆炸; High value of short-circuit current withstanding to ensure the contacts can be reliably closed when encountering short-circuit current, contributing to no risk of fire and explosion;

无极性灭弧设计,安装方向不敏感,适用回路双向电流的各种场景,使用安全可靠;

Non-polarity arc extinguishing design that is applicable to a range of scenarios with bidirectional current circuit safely and reliably;

可选配一组常开辅助触点;

A set of NO auxiliary contacts is optional;

能够在85°C环境下持续承载600A电流;

Carrying current 600A continuously at 85°C;

^立品型号说明 Product Model:

	HC	F	600	□/	2500	-12	Н	С	2	Н		- ()
公司代码 Company Code												
系列代码 Series Code	F:方形系 Square S	列 Series										
触点容量(额定电流) Contact Rating(Rated)	Current)	600:600	Ą									
衍生型号 Derivative Model	无 Nil: 基	本型 Basic	: Mode	el								
负载电压 Load Voltage	2000:2000VDC; 2500:2500VDC											
线圈电压 Coil Voltage	12:12VDC; 24:24VDC; 48:48VDC											
主触点形式 Main Contact Type	H: 一组常开 SPST-NO											
线圈出线方式 Coil Input Terminal	C : 连接暑	& Connecto	or									
负载引出端方式 Load Input Terminal	1: 内螺约	文 Internal	Thread];2: 外螺纹 Exte	rnal Thr	ead						
辅助触点 Auxiliary Contact	无 Nil: 无辅助触点 No Auxiliary Contact; H: 一组常开 SPST-NO											
安装形式 Mounting	无 Nil: 立体安装 Vertical Mounting											
特性号 Special Code	XXX: 客	户特殊要求	Cust	omer Special Co	ode; 无	Nil: 标准型 Star	ndard					



DC CONTACTOR

DC CONTACTOR

HCF600/D-DHC1











组合螺钉示意(选配) Combination Screw(Optional)



接线图 Coil Wiring Diagram 未注公差 General Tolerance: <10mm:±0.3mm 10~50mm:±0.5mm >50mm:±0.8mm

特性参数 CHARACTERISTIC PARAMETERS								
主触点参数	MAIN CONTACT DAT	A						
最大工作电压 Max. Switching Voltage		2500VDC	额定电流 Rated Curre	nt		600A		
触点形式 Contact Arrangement		一组常开 SPST-NO	触点压降 Contact Voltage Drop		op	≤0.12V(at 600A)		
短时承载电流 Limiting Sho	^流 ort-time Current	700A:10min; 1000A:60s; 1600A:10s; 3000A:	:1s					
电寿命(阻性负载)		2000VDC D Model 2500VD				DC 型 Model		
Electrical Lif	e (Resistive Load)	400A 2000VDC 300 次(Ops), 仅分断 Only Brea 600A 2000VDC 200 次(Ops), 仅分断 Only Brea	aking aking		400A 2500VDC 300 600A 2500VDC 200	坎(Ops),仅分断 Only Breaking 坎(Ops),仅分断 Only Breaking		
最大分断电》 Max. Breaking (Resistive Logi	充(阻性负载) ng Current oad)	2000A 1000VDC 1 次(ops);1000A 1500VDC	/DC 1 次(ops)					
过载分断(P Overload Br	阻性负载) eaking (Resistive Load)	1000A 900VDC 100 次(ops)						
耐短路电流 Short Circuit	t Current Withstanding	8000A(5ms) 不冒烟、不起火 No Smoke or Fire						
性能参数(CHARACTERISTIC DAT	ΓΑ						
介质耐压 Dielectric	主触点与线圈间(初始) Between Main Contacts and Coil (Initial)	≥5000VAC(1min)	绝缘电阻	主触点与线圈问(初始) Between Main Contacts and Coil (Initial) 断开主触点问(初始) Between Open Main Contacts (Initial)		≥1000MΩ(2500VDC)		
Strength	断开主触点间(初始) Between Open Main Contacts (Initial)	≥5000VAC(1min)	Resistance			≥1000MΩ(2500VDC)		
耐冲击 Shock	功能性 Functional	20g 半正弦波 Half-Sine Wave 11ms	耐振动 Vibration	功能	生	5.79g (10~2000Hz 随机 Bandom)		
Resistance	强度 Destructive	50g 半正弦波 Half-Sine Wave 6ms	Resistance	Func	tional			
吸合时间 Operate Tim	ie	Max:50ms	机械寿命 Mechanical l	_ife		2*10 ⁵ 次(ops)		
释放时间 Release Tim	ie	Max:30ms	重量 Weight			约 Approx 1300g		
线圈参数(COIL DATA							
额定电压 Rated Voltag	ge	12VDC	24VDC			48VDC		
吸合电压 Pick-up Volt	age	≤9VDC	≤18VDC			≤36VDC		
释放电压 Drop-out Vo	Itage	≥1.2VDC	≥2.4VDC			≥4.8VDC		
线圈功率 Rated Opera	ating Power	约 Approx 60W(启动 Start); 5.4W(保持 Hold)	约 Approx 6 5.4W(保持 H	0W(启i Hold)	动 Start);	约 Approx 60W(启动 Start); 5.4W(保持 Hold)		
最大允许电/ Max_Allowa	<u>∓</u> ble Voltage	16VDC	32VDC			64VDC		

DC CONTACTOR

HCF600/ - HC2











未注公差 General Tolerance: <10mm:±0.3mm 10~50mm:±0.5mm >50mm:±0.8mm

特性参数 CHARACTERISTIC PARAMETERS								
主触点参数	MAIN CONTACT DAT	A						
最大工作电。 Max. Switch	大工作电压 x. Switching Voltage 2500VDC 1		额定电流 Rated Curre	nt		600A		
触点形式 Contact Arra	angement	一组常开 SPST-NO	触点压降 Contact Volta	age Dro	ор	≪0.12V(at 600A)		
短时承载电: Limiting Sho	流 prt-time Current	700A:10min; 1000A:60s; 1600A:10s; 3000A:1s						
申寿命(阻性负载)		2000VDC 型 Model 2500VDC 型 Model						
Electrical Li	(Resistive Load) 400A 2000VDC 300 次(Ops), 仅分断 Only Breaking 600A 2000VDC 200 次(Ops), 仅分断 Only Breaking		aking aking		400A 2500VDC 300 600A 2500VDC 200	次(Ops),仅分断 Only Breaking 次(Ops),仅分断 Only Breaking		
最大分断电: Max. Breaki (Resistive L	流(阻性负载) ing Current oad)	2000A 1000VDC 1 次(ops);1000A 1500VDC	1 次(ops)					
过载分断(Overload Bi	阻性负载) reaking (Resistive Load)	1000A 900VDC 100 次(ops)						
耐短路电流 Short Circui	t Current Withstanding	8000A(5ms) 不冒烟、不起火 No Smoke or	8000A(5ms) 不冒烟、不起火 No Smoke or Fire					
性能参数	CHARACTERISTIC DAT	ΓΑ						
介质耐压	主触点与线圈问(初始) Between Main Contacts and Coil (Initial)	≥5000VAC(1min)	绝缘电阻	主触点与线圈问(初始) Between Main Contacts and Coil (Initial)		≥1000MΩ(2500VDC)		
Strength	断开主触点间(初始) Between Open Main Contacts (Initial)	≥5000VAC(1min)	Resistance Between Open Main Contacts (Initial)		主触点间(初始) een Open Main acts (Initial)	≥1000MΩ(2500VDC)		
耐冲击 Shock	功能性 Functional	20g 半正弦波 Half-Sine Wave 11ms	耐振动 Vibration JUbration		姓	5.79g (10~2000Hz、随机 Random)		
Resistance	强度 Destructive	50g 半正弦波 Half-Sine Wave 6ms	Resistance	Funct	tional			
吸合时间 Operate Tin	ne	Max:50ms	机械寿命 Mechanical l	ife		2*10⁵ 次(ops)		
释放时间 Release Tin	ne	Max:30ms	重量 Weight			约 Approx 1300g		
线圈参数	CO I L DATA		1					
额定电压 Rated Voltage		12VDC	24VDC			48VDC		
吸合电压 Pick-up Volt	age	≤9VDC	≤18VDC			≤36VDC		
释放电压 Drop-out Vo	ltage	≥1.2VDC	≥2.4VDC			≥4.8VDC		
线圈功率 Rated Oper	ating Power	约 Approx 60W(启动 Start); 5.4W(保持 Hold)	约 Approx 6 5.4W(保持 H	0W(启动 Hold)	动 Start);	约 Approx 60W(启动 Start); 5.4W(保持 Hold)		
最大允许电。 Max. Allowa	压 Ible Voltage	16VDC	32VDC			64VDC		

HCF600/ - HC1H







DC CONTACTOR





组合螺钉示意(选配) Combination Screw(Optional)



未注公差 General Tolerance: <10mm:±0.3mm 10~50mm:±0.5mm >50mm:±0.8mm

特性参数 CHARACTERISTIC PARAMETERS

王熙点豕剱		4					
最大工作电应 Max. Switchi	<u>⊩</u> ing Voltage	2500VDC	额定电流 Rated Current			600A	
触点形式 Contact Arra	angement 一组常开 SPST-NO 触点压降 Contact Voltage Drop		op	≪0.12V(at 600A)			
短时承载电测 Limiting Sho	kt rt-time Current	700A:10min; 1000A:60s; 1600A:10s; 3000A:1s					
由 寿命 (阳 姓 缶 载)		2000VDC 型 Model			2500VDC 型 Model		
Electrical Life	e (Resistive Load)	400A 2000VDC 300 次(Ops), 仅分断 Only Brea 600A 2000VDC 200 次(Ops), 仅分断 Only Brea	king king		400A 2500VDC 300 600A 2500VDC 200	次(Ops),仅分断 Only Breaking 次(Ops),仅分断 Only Breaking	
最大分断电流(阻性负载) Max, Breaking Current (Resistive Load) 2000A 1000VDC 1 次(ops);1000A 1500VDC 1 次(ops)							
过载分断(N Overload Bro	且性负载) eaking (Resistive Load)	1000A 900VDC 100 次(ops)					
耐短路电流 Short Circuit	Current Withstanding	8000A(5ms) 不冒烟、不起火 No Smoke or F	ire				
性能参数(CHARACTERISTIC DAT	Ā					
	主触点与线圈间(初始) Between Main Contacts and Coil (Initial)	≥5000VAC(1min)	主触点与线圈问(初始) Between Main Contacts and Coil (Initial)		瓦与线圈间(初始) een Main Contacts Coil (Initial)	≥1000MΩ(2500VDC)	
介质耐压 Dielectric Strength	下质耐压 bielectric tocoath Contacts (Initial) S000VAC(1min)	≥5000VAC(1min)	绝缘电阻 Insulation Resistance	断开主触点间(初始) Between Open Main Contacts (Initial)		≥1000MΩ(2500VDC)	
	主触点与辅助触点问(初始) Between Main Contacts and Auxiliary Contact (Initial)	≥5000VAC(1min)		主触点 Betwe and A (Initial	、与辅助触点间(初始) een Main Contacts uxiliary Contact))	≥1000MΩ(2500VDC)	
耐冲击 Shock	功能性 Functional	20g 半正弦波 Half-Sine Wave 11ms	耐振动 Vibration Resistance		能性	5 . 79g (10~2000Hz, 随机 Random)	
Resistance	^{独反} Destructive	50g 半正弦波 Half-Sine Wave 6ms			Incuonal		
败合时间 Operate Tim	e	Max:50ms	机械寿命 Mechanical L	_ife		2*10 ⁵ 次(ops)	
释放时间 Release Tim	e	Max:30ms	重量 Weight			约 Approx 1300g	
线圈参数 (COIL DATA						
额定电压 Rated Voltag	je	12VDC	24VDC			48VDC	
吸合电压 Pick-up Volta	age	≤9VDC	≤18VDC			≤36VDC	
释放电压 Drop-out Vol	tage	≥1.2VDC	≥2.4VDC			≥4.8VDC	
线圈功率 Rated Operating Power		约 Approx 60W(启动 Start); 5.4W(保持 Hold)	约 Approx 60W(启动 Start); 5.4W(保持 Hold)		为 Start);	约 Approx 60W(启动 Start); 5.4W(保持 Hold)	
最大允许电压 Max. Allowal	E ole Voltage	16VDC	3VDC 32VDC			64VDC	
辅助触点参	数 AUXILIARY CONTA	CT DATA	1 				
辅助触点形式 Auxiliary Cor	t ntact Arrangement	一组常开 SPST-NO	辅助触点使用范围 Auxiliary Contact Range		ange	100mA/8VDC~2A/30VDC	
辅助触点电图 Auxiliary Cor	ntact Resistance	≤200mΩ (at 100mA)				·	

ΗΙΙΤΙΟ

DC CONTACTOR



特性参数 CHARACTERISTIC PARAMETERS

王触点参委	🕅 MAIN CONTACT DAT	A	-				
最大工作电, Max. Switch	最大工作电压 Max. Switching Voltage 2500VDC		额定电流 Rated Current			600A	
触点形式 Contact Arra	angement	一组常开 SPST-NO	触点压降 Contact Voltage Drop		ор	≤0.12V(at 600A)	
短时承载电: Limiting Sho	流 ort-time Current	700A:10min; 1000A:60s; 1600A:10s; 3000A:	:1s				
		2000VDC 型 Model			2500VDC 型 Model		
Electrical Li	fe (Resistive Load)	400A 2000VDC 300 次(Ops), 仅分断 Only Brea 600A 2000VDC 200 次(Ops), 仅分断 Only Brea	aking aking		400A 2500VDC 300 600A 2500VDC 200	次(Ops),仅分断 Only Breaking 次(Ops),仅分断 Only Breaking	
最大分断电: Max. Breaki (Resistive L	流(阻性负载) ing Current oad)	2000A 1000VDC 1 次(ops);1000A 1500VDC) ₩DC 1 次(ops)				
过载分断(阻性负载) Overload Breaking (Resistive Load) 1000A 900VDC 100 次(ops)							
耐短路电流 Short Circui	t Current Withstanding	8000A(5ms) 不冒烟、不起火 No Smoke or I	Fire				
性能参数	CHARACTERISTIC DAT	TA					
	主触点与线圈间(初始) Between Main Contacts and Coil (Initial)	≥5000VAC(1min)		主触点 Betwo and C	点与线圈间(初始) een Main Contacts Coil (Initial)	≥1000MΩ(2500VDC)	
介质耐压 Dielectric Strength	断开主触点间(初始) Between Open Main Contacts (Initial)	≥5000VAC(1min)	绝缘电阻 Insulation Resistance	断开主触点间(初始) Between Open Main Contacts (Initial)		≥1000MΩ(2500VDC)	
enengu	主触点与辅助触点间(初始) Between Main Contacts and Auxiliary Contact (Initial)	≥5000VAC(1min)		主触点 Betwe and A (Initial	《与辅助触点间(初始) een Main Contacts uxiliary Contact l)	≥1000MΩ(2500VDC)	
耐冲击 Shock	功能性 Functional	20g 半正弦波 Half-Sine Wave 11ms	耐振动 Vibration 功能		能性	5 . 79g (10~2000Hz, 随机 Random)	
Resistance	通度 Destructive	50g 半正弦波 Half-Sine Wave 6ms	Resistance	nce Functional			
败合时间 Operate Tin	ne	Max:50ms	机械寿命 Mechanical I	Life		2*10 ⁵ 次(ops)	
释放时间 Release Tin	ne	Max:30ms	重量 Weight			约 Approx 1300g	
线圈参数	COIL DATA						
额定电压 Rated Volta	ge	12VDC	24VDC			48VDC	
吸合电压 Pick-up Volt	age	≤9VDC	≤18VDC			≤36VDC	
释放电压 Drop-out Voltage		≥1 . 2VDC	≥2.4VDC			≥4.8VDC	
线圈功率 Rated Operating Power		约 Approx 60W(启动 Start); 5.4W(保持 Hold)	约 Approx 60W(启动 Start); 5.4W(保持 Hold)		动 Start);	约 Approx 60W(启动 Start); 5.4W(保持 Hold)	
最大允许电 Max. Allowa	压 ble Voltage	16VDC	32VDC			64VDC	
辅助触点参	参数 AUXILIARY CONTA	CT DATA	·				
辅助触点形 Auxiliary Co	式 ontact Arrangement	一组常开 SPST-NO	辅助触点使用 Auxiliary Cor	目范围 ntact Ra	ange	100mA/8VDC~2A/30VDC	
辅助触点电 Auxiliary Co	阻 mtact Resistance	≤200mΩ (at 100mA)	-				

DC CONTACTOR

电流承载曲线 Current Carry Curve:





使用注意事项 Caution:

- 1.规格书内的各项性能参数是基于标准测试条件下测得的初始值。 All the performance parameters listed in this specification are deemed as initial value measured under standard testing conditions.
- 2.使用环境温度-40°C~+85°C,湿度5%~85%RH。 Used in environment temperature -40°C~+85°C, humidity 5%~85%RH.
- 3.清避免安装在强磁场(变压器、磁铁周围)或发热物体附近。 Please avoid installing the device near high magnetic fields (eg.transformers or magnetics) or hot objects.
- 4.电寿命试验为阻性负载时的数值,应用在L/R≥1ms的感性负载回路时,请与感性负载并行采取浪涌吸收措施。未采取措施的情况下,可能会成电气寿命下降、发生切断不良。

The electrical life test is performed with resistive load. Therefore, please take surge absorption measures in parallel with inductive load when the device is applied to inductive load circuit with L/R≥1ms. Otherwise, the electrical life is likely to decline, resulting in poor cutting off.

- 5.应用在容性负载回路时,请注意采取预充等措施,建议接触器闭合压差控制在20V以内。如未采取措施,可能会造成触点粘连。 Measures including precharging etc. must be taken if the device is to be applied in capacitive load circuit.It is suggested that the differential pressure be controlled within 20V when the contactor is in closed position. Otherwise, it might lead to contact adhesion.
- 6.接触器的线圈有极性,因此在进行线圈的连接时,请按接线图的指示进行操作。 The coils of the contactor are polarized, so follow the connection schematic when connecting the coils.
- 7.接触器内置单触发脉冲发生电路,请通过快速上升沿(脉冲式供电方式)驱动线圈;接触器接通信号后,约300ms后线圈电流 自动切换,请避免间隔不满300ms的重复切换操作。 The contactor has a built-in one-shot pulse generator circuit, please drive the coil with a quick startup (pulse power supply mode); after the signal enters contactor, automatic coil current switching occurs after approximately 300ms, please avoid repetitive switch in which interval time is less than 300ms.
- 8.请避免在引出端上粘附油脂等异物,建议使用400mm²以上规格导线,否则有可能造成引出端异常发热。 Please avoid adhering such foreign matters as grease etc. on the leading-out terminals. Over 400mm² conductors shall be used. Otherwise, it will casue abnormal heating of leading-out terminals.
- 9.清避免在使用或运输过程中发生撞击或跌落。为保持产品的性能,撞击或跌落后不建议继续使用。 Please avoid collision or falling during use or transportation. In order to maintain the performance of the product, it is not recommended to continue to use it after impact or fall.
- 10. 当产品使用1个及多个导电铜排连接时,请确保导电铜排与触点端面紧密贴合(多个铜排需确保大电流的导电铜排最贴近触点端面,小电流的 导电铜排其次),然后是平垫圈、弹簧垫圈、螺母。不正确的连接顺序可能造成严重过热,参考下图1: When the product is connected with one or more conductive copper bars, please ensure that the conductive busbars closely fit the contact terminal surface (The conductive copper bars with high current must be closet to the contact terminal surface if there are multiple copper bars and then conductive busbars with low current), followed by flat washers, spring washers and screws. Incorrect connection sequence perhaps give rise to severe overheatng. Refer to Figure 1 as follows:
- 11.螺钉安装时,螺纹咬合深度不能过浅,否则有可能导致滑牙松脱,建议咬合深度至少螺纹深度的2/3。 When installing the screws, the thread engagement depth shall not be too shallow, otherwise it may cause the sliding teeth to become loose. It is recommended that the engagement depth be at least 2/3 of the thread depth.
- 12.为防止出现松动,接触器安装时请使用垫圈螺钉锁紧,各部位的螺钉锁紧扭矩请控制在以下范围: To prevent looseness, the contactor shall be locked with washer screws during installation, and the screw locking torque of each part shall be controlled within the following range:

	十名共,	之壮刘位	拉铀坚圭体 定状部位(图9)			
	工贝轼了	女衣叩匹	按照研究评文表印但(图2)			
	Main loading i	nstallation part	Contactor shell installation department (figure 2)			
安装方式	扭矩要求	铜排孔径	铜排厚度	安装方式	扭矩要求	底板孔径
nstallation	Torque	Diameter of	Busbar	Installation	Torque	Diameter of
method	requirements	busbar	thickness	method	requirements	baseboard
M8螺母 Nut	9N·m~10N·m	Ø8mm~Ø8.5mm	≥4mm	MG HE FT SOROW	6N-m-9N-m	MG
M6螺钉 Screw	6N·m~8N·m	Ø6mm~Ø6.5mm	≥4mm	WIO 练行 SCIEW	010-111~010-111	IVIO

