

## GSC1系列交流接触器

### GSC1 Range AC contactor

#### 一、用途 APPLICATION



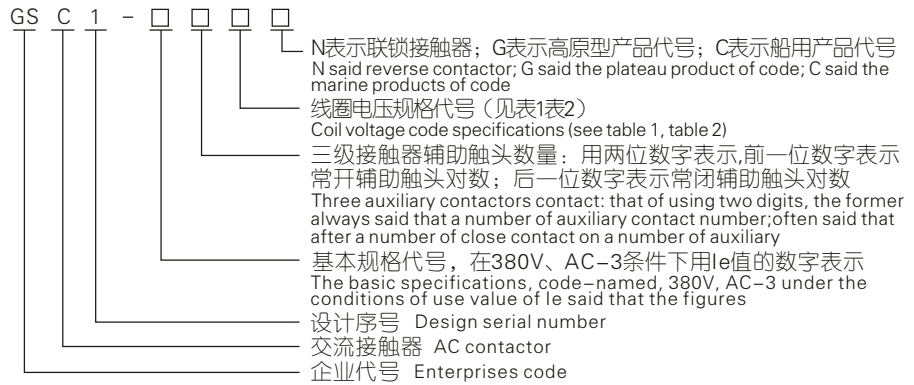
GSC1系列交流接触器主要用于交流50Hz（或60Hz），9A-95A额定绝缘电压为690V，115A-150A额定绝缘电压为1000V，在AC-3使用类别下额定工作电压为380V时额定工作电流至150A的电路中，供远距离接通和分断电路，并可与适当的热过载继电器组成电磁起动器以保护可能发生过载的电路。

GSC1 range AC contactor is used in frequency 50Hz(or 60Hz), rated insulation voltage is up to 690V, and current is up to 95A under rated voltage 380V and AC-3, for long-distance making and breaking circuit, and can interoperate with appropriate thermal overload relay as electromagnetic starter to protect potential overload circuit.



#### 二、型号及含义 TYPE AND MEANING

##### △ GSC1-9A-95A



##### △ GSC1-115A-150A



表(table)1

型号 type	电源频率Hz Power frequency	线圈电压V coil voltage					
		24	48	110~120	220~240	380	415
GSC1-09~38	50/60	B7	E7	F7	M7	/	/
	50	/	/	/	/	Q	/
	60	/	/	/	/	/	Q

表(table)2

型号 type	电源频率Hz Power frequency	线圈电压V coil voltage							
		24	48	110	120	220	240	380	415
GSC1-40~95	50/60	B7	E7	F7		M7		Q7	/
	50	B	E	F	/	M	/	Q	/
	60	/	/	/	F	/	M	/	Q



### 三、结构特点 STRUCTURE FEATURE

- △ 动作机构为直动式，触头为双断点；  
Direction-moving, double breaking contact terminals;
- △ 组合功能，除安装面外，其余各面均能加装附件；  
Combination function, in addition to the installation surface, other surfaces can be added accessory;
- △ 两侧可加装辅助触头组（F3-d1）或联锁机构；  
Both sides can be fixed auxiliary contact arrangement (F3-d) or reverse device;
- △ 上方可加装（F3-d或F3-d2）或空气延时（SK4-2/3d）；  
Can add installation (F3-d or F3-d2) or air time-delay (SK4-2/3d) on above;
- △ 线圈接线端可加装时间延时器等各种功能模块。  
Wiring terminal can be added time-delay and other function model.

### 四、工作条件和安装条件 WORKING CONDITION AND INSTALLATION CONDITION

- △ 周围空气温度 $-5^{\circ}\text{C} \sim +40^{\circ}\text{C}$ ； Ambient temperature:  $-5^{\circ}\text{C} \sim +40^{\circ}\text{C}$ ；
- △ 安装地点海拔不超过2000m； Elevation $\leq 2000\text{m}$ ；
- △ 最高温度为 $+40^{\circ}\text{C}$ 时，空气的相对湿度不超过50%，在较低温度下可以允许有较高的相对湿度，例如 $20^{\circ}\text{C}$ 时达90%。对由于温度变化偶尔产生的凝露应采取特殊的措施；  
Relative humidity is not exceeding 50% at the maximum ambient temperature  $+40^{\circ}\text{C}$ . With lower temperature, higher humidity would be permitted. such as, humidity is up to 90% at the ambient temperature  $20^{\circ}\text{C}$ . Should give consideration to the dews, which would appear due to temperature change;
- △ 污染等级为“污染等级3”； Pollution grade: Grade 3;
- △ 安装类别为“安装类别Ⅲ”； Installation categories: class Ⅲ;
- △ 除用螺钉安装外，还可采用35mm、75 mm标准卡轨安装。  
Installation way: mounted by screw or 35mm、75mm standard rail track.
- △ 船用交流接触器： Marine AC contactor:
- △ 周围空气温度 $-25^{\circ}\text{C} \sim +45^{\circ}\text{C}$ ； Ambient temperature:  $-25^{\circ}\text{C} \sim +45^{\circ}\text{C}$ ；
- △ 大气条件：可有凝露、盐雾、油雾、霉菌、海上潮湿空气等存在；  
Air condition: be able to bear the influence of moisture in the air、salt fog、oil fog、mould、humid air on the sea;
- △ 各方向倾斜不大于 $22.5^{\circ}$ ，各方向摇摆不大于 $22.5^{\circ}$ ，周期10秒；  
The tilt and swing gradient $\leq 22.5^{\circ}$ ，bear time $\leq 10\text{s}$ ；
- △ 振动：可安装和使用在频率2-13.2Hz，振幅为 $\pm 1\text{mm}$ 以内，又可使用在频率13.2~100Hz，加速度为 $\pm 7\text{m/s}^2$ 以内的地方。  
Shock: can bear frequency 2-13.2Hz and amplitude in  $\pm 1\text{mm}$  or frequency 13.2~100Hz and acceleration  $\pm 7\text{m/s}^2$ .

### 五、规格 CHARACTER

- 接触器规格 contactor character



△ GSC1-9A-95A

表(table)3

型号 type	额定工作电流A AC-3 380V	控制功率kw control power					触头数量 Contact volume
		220V	380V	415V	440V	660V	
GSC1-09	9	2.2	4	4	4	5.5	3P+NO或 3P+NC
GSC1-12	12	3	5.5	5.5	5.5	7.5	
GSC1-18	18	4	7.5	9	9	9	
GSC1-25	25	5.5	11	11	11	15	
GSC1-32	32	7.5	15	15	15	18.5	
GSC1-38	38	9	18.5	18.5	18.5	18.5	
GSC1-40	40	11	18.5	22	22	30	3P+NO+NC
GSC1-50	50	15	22	25	30	33	
GSC1-65	65	18.5	30	37	37	37	
GSC1-80	80	22	37	45	45	45	
GSC1-80	80	22	37	45	45	45	
GSC1-95	95	25	45	45	45	45	

△ GSC1-115A-150A

表(table)4

型号 type	额定发热电流 I <sub>th</sub> (A) Conventional thermal current	AC-3使用类别 using type			
		额定工作电流 I <sub>e</sub> (A) Tated working current		控制三相鼠笼型电动机最大功率 (KW) Control 3 phase squirrel cage motor maximum power	
		380V	660V	380V	660V
GSC1-115	200	115	86	55	80
GSC1-150	200	150	107	75	100

3P: 三对常开主触头 NO: 一对常开辅助触头 NC: 一对常闭辅助触头  
 3P: three pair normal open main contact; NO: one pair normal open auxiliary  
 contact; NC: one pair normal close auxiliary contact

■ 附件规格 Annex character

△ F3-d辅助触头组

Auxiliary contact team 表(table)5

型号 type	触头数量 Contact volume
F3-10d <sub>2</sub>	NO
F3-01d <sub>2</sub>	NC
F3-11d	NO+NC
F3-11d <sub>1</sub>	NO+NC (侧安装) (install side)
F3-20d <sub>1</sub>	2NO (侧安装) (install side)
F3-02d	2NC
F3-20d	2NO
F3-22d	2NO+2NC
F3-40d	4NO
F3-04d	4NC
F3-31d	3NO+NC
F3-13d	NO+3NC



△ SK4-d空气延时头

SK4-d Air time-delay 表(table)6

型号 type	延时范围 time-delay area	延时触头数量 Time-delay contact volume	备注 remark
Sk4-220d	0.1~3S	NO+NC	通电延时 Making time-delay
Sk4-222d	0.1~30S		
Sk4-224d	10~180S		
Sk4-320d	0.1~3S		
Sk4-322d	0.1~30S		断电延时 Breaking time-delay
Sk4-324d	10~180S		

六、技术参数 TECHNICAL PARAMETERS

本系列产品符合标准: IEC60947-4, GB14048.4

The range product meet standard: IEC60947-4, GB14048.4

## △ GSC1-9A-95A

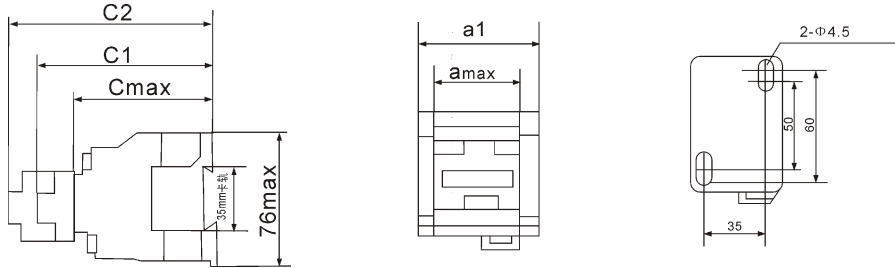
型号 type		GSC1-09	GSC1-12	GSC1-18	GSC1-25	GSC1-32	GSC1-38	GSC1-40	GSC1-50	GSC1-65	GSC1-80	GSC1-95											
参数 parameters	额定工作电压 Ue V Rated work voltage	380V	660	380	380			660 380															
	额定绝缘电压 Ui V Rated insulation voltage	690																					
AC-3 (6le, le)	电寿命(次) Electric life span	100	100	100	100	80	50	80	60	60	60	60											
	操作频率 h <sup>-1</sup> Operation frequency	1200	1200	1200	1200	600	600	600	600	600	600	600											
AC-4 (6le, 6le)	电寿命(次) Electric life span	20	20	20	20	20	15	15	15	15	10	10											
	操作频率 h <sup>-1</sup> Operation frequency	300				150																	
	额定电流 Rated current	380V	3.5	5	7.7	8.5	12	13.9	18.5	24	28	37	44										
辅助触头 Auxiliary contact	约定发热电流 Ith A Conventional thermal current	10																					
	可接通最小负载 Connect minimum load	24V 10mA																					
线圈 Coil	额定控制电压 Us V Rated control voltage	24、48、110、220、380																					
	吸合电压 Pull voltage	0.85~1.10Us																					
	释放电压 Release voltage	0.2~0.75 Us																					
	线圈功率 VA Coil power	吸合 pull	76	76	76	110	110	110	230	230	230	230	230										
	保持 contain	10	10	10	11	11	11	32	32	32	32	32											
机械寿命 10 <sup>4</sup> 次 Machinery life span of trip times		1000					800					600											
接线端子可 接线 mm <sup>2</sup> Terminal Blocks can wiring mm <sup>2</sup>	导线根数 Wire a few root	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2		
	软线 Soft Line	2.5	2.5	2.5	2.5	4	4	4	4	6	6	6	6	10	10	16	16	16	16	50	25	50	25
	硬线 Hard Line	4	4	4	4	6	6	6	-	10	10	10	10	10	10	25	-	25	-	50	-	50	-

## △ GSC1-115A-150A

接触器型号 contactor type		GSC1-115				GSC1-150			
额定工作电流 Ie A (AC-3) Rated working current	380 V	115				150			
	660 V	86				107			
约定发热电流 Ith (A) conventional thermal current		200							
额定工作电压 Ue (V) Rated working voltage		380、660							
额定绝缘电压 Ui (V) Rated insulation voltage		1000							
AC-3 (6le, le)	电寿命 10 <sup>4</sup> 次 Life span of trip 10 <sup>4</sup> time	40				40			
	操作频率 h <sup>-1</sup> Operatin frequency	600				300			
AC-4 (6le, 6le)	电寿命 10 <sup>4</sup> 次 Life span of trip 10 <sup>4</sup> time	10							
	操作频率 h <sup>-1</sup> Operatin frequency	300							
	额定工作电流 Ie (A) Rated working current	380 V	54				63		
	660 V	27				35			
线圈参数 Coil character	额定控制电压 Us (V) Rated control voltage	24 V、36 V、48 V、110 V、200 V、220V、380 V							
	吸合电压 pull voltage	0.8Us~1.1Us							
	释放电压 release	0.2 Us~0.55 Us							
	吸合功率 (VA) pull power	300							
	保持功率 (VA) contain power	22							

## 七、外形尺寸与安装尺寸 OUTLINE DIMENSIONS AND MOUNTING DIMENSIONS

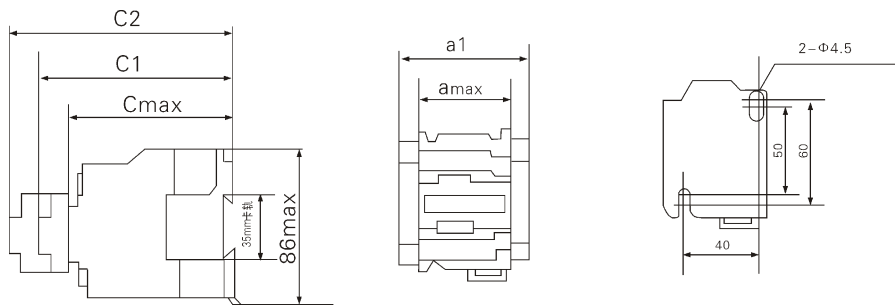
### △ GSC1-09、12、18



注(remark): C: GSC1  
C1: GSC1+F3-d  
C2: GSC1+SK4-2/3d  
a1: GSC1+2 (F3-d1)

型号 type	amax	cmax	C1	C2	a1
GSC1-09、12	47	82	115	134	73
GSC1-18	47	87	120	139	73

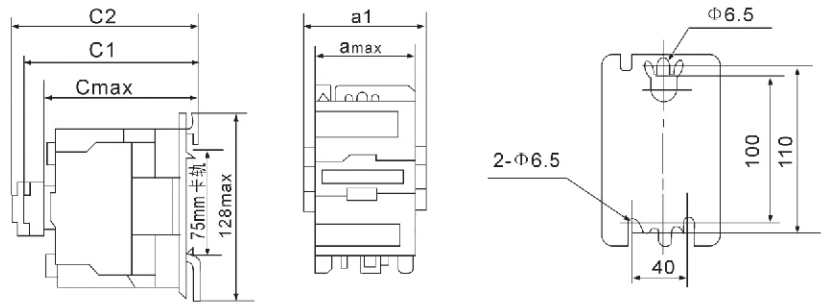
### △ GSC1-25、32、38



注(remark): C: GSC1  
C1: GSC1+F3-d (或F3-d2)  
C2: GSC1+SK4-2/3d  
a1: GSC1+2 (F3-d1)

型号 type	amax	cmax	C1	C2	a1
GSC1-25	59	97	130	149	85
GSC1-32	59	102	135	154	85
GSC1-38	59	102	135	154	85

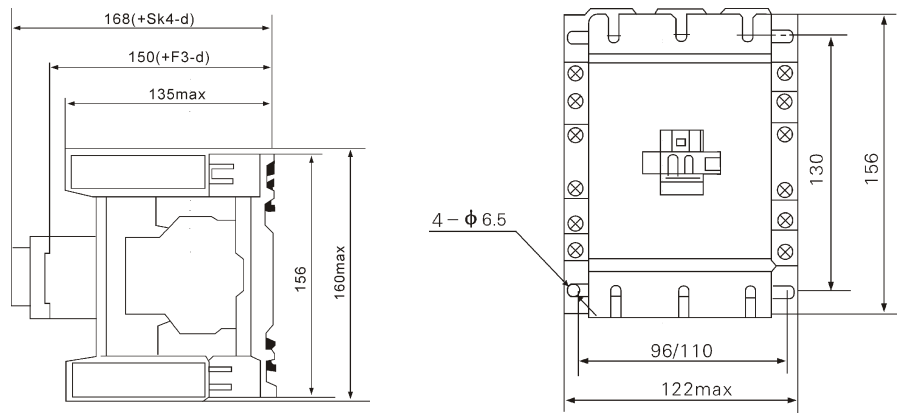
### △ GSC1-40、50、65、80、95



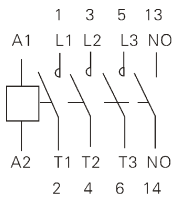
注(remark) : C: GSC1  
 C1: GSC1+F3-d (或F3-d2)  
 C2: GSC1+SK4-2/3d  
 a1: GSC1+ 2 (F3-d1)

型号type	amax	cmax	C1	C2	a1
GSC1-40d, 50d, 65d	79	116	149	168	105
GSC1-80d, 95d	87	127	160	179	113

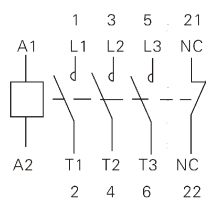
△ GSC1-115、150



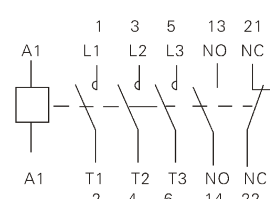
八、接线图 WIRING PICTURE



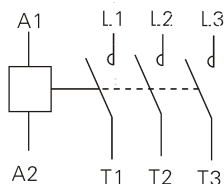
GSC1-0910~3810



GSC1-0901~3801



GSC1-4011~9511



GSC1-115~150

## 九、订货须知 ORDER REMARK

---

- 在订货中应写明以下内容： In order need attention following:
  - △ 接触器的全型号及名称； Entitle type of contactor;
  - △ 控制线圈的频率及电压； Frequency and Voltage of control coil;
  - △ 订购数量： Order volume:
    - 例如：交流接触器 GSC1-0910 M7 220V~240V 50Hz/60Hz 10台
    - Example: AC contactor GSC1-0910 M7 220V~240V 50Hz/60Hz 10 sets
    - 表示为9A接触器，辅助触头为常开，控制电压的频率为50Hz/60Hz，电压为220V~240V，订货数量为10台。
    - Means need: the contactor is 9A,normal open auxiliary, control voltage Frequency 50Hz/60Hz, voltage 220V~240V, volume 10 sets.
  - △ 特殊电压规格产品,如用户需要可特殊订货。
    - Special voltage character product, can special customize if need.