

# SGC1-D/W Series AC Contactor

## Technical data

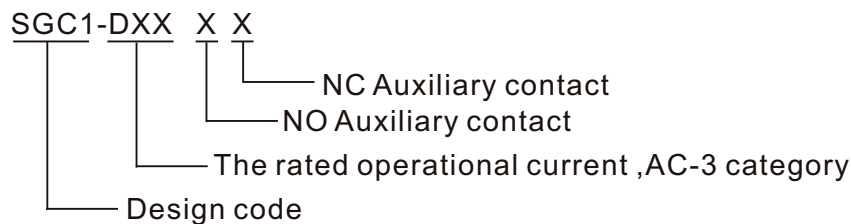
Standard	IEC60947-4-1	
Electric ratings	Up to 95A,690V	
Approvals	CE, SEMKO, CB	
Operation Range	Pick-up voltage	(85%~110%) Us
	Drop-out voltage	(20%~75%) Us
Rated insulation voltage Ui(V)	690	
Rated impulse withstand voltage Uimp(kV)	6	
Rated frequency(Hz)	50/60	
Utilization category	AC-3,AC-4	
Degree of protection	IP20	
Ambient air temperature(°C)	-5 to+40,max.95%humidity	
Storage temperature(°C)	-40~+75	
Maximum operating altitude (meters)	≤2000	
Flame resistance	V1	



## 1. Selection and ordering data

	Rated Operational current in category AC-3 400V (A)	Number of poles		Instantaneous auxiliary contacts		Standard control circuit voltages (VAC)	Rated frequency (HZ)	Type	Model
	9	3	-	1	-	230	50/60	3NO+NO	SGC1-D0910/W
		3	-	-	1	230	50/60	3NO+NC	SGC1-D0901/W
		4	-	-	-	230	50/60	4NO	SGC1-D09004/W
		2	2	-	-	230	50/60	2NO+2NC	SGC1-D09008/W
	12	3	-	1	-	230	50/60	3NO+NO	SGC1-D1210/W
		3	-	-	1	230	50/60	3NO+NC	SGC1-D1201/W
		4	-	-	-	230	50/60	4NO	SGC1-D12004/W
		2	2	-	-	230	50/60	2NO+2NC	SGC1-D12008/W
	18	3	-	1	-	230	50/60	3NO+NO	SGC1-D1810/W
		3	-	-	1	230	50/60	3NO+NC	SGC1-D1801/W
		3	-	1	-	230	50/60	3NO+NO	SGC1-D2510/W
		3	-	-	1	230	50/60	3NO+NC	SGC1-D2501/W
	25	4	-	-	-	230	50/60	4NO	SGC1-D25004/W
		2	2	-	-	230	50/60	2NO+2NC	SGC1-D25008/W
		3	-	1	-	230	50/60	3NO+NO	SGC1-D3210/W
		3	-	-	1	230	50/60	3NO+NC	SGC1-D3201/W
	32	3	-	1	1	230	50/60	3NO+NO+NC	SGC1-D4011/W
		4	-	-	-	230	50/60	4NO	SGC1-D40004/W
		2	2	-	-	230	50/60	2NO+2NC	SGC1-D40008/W
		3	-	1	1	230	50/60	3NO+NO+NC	SGC1-D5011/W
	40	4	-	-	-	230	50/60	4NO	SGC1-D50004/W
		2	2	-	-	230	50/60	2NO+2NC	SGC1-D50008/W
		3	-	1	1	230	50/60	3NO+NO+NC	SGC1-D6511/W
		4	-	-	-	230	50/60	4NO	SGC1-D65004/W
	50	2	2	-	-	230	50/60	2NO+2NC	SGC1-D65008/W
		3	-	1	1	230	50/60	3NO+NO+NC	SGC1-D8011/W
		4	-	-	-	230	50/60	4NO	SGC1-D80004/W
		2	2	-	-	230	50/60	2NO+2NC	SGC1-D80008/W
	65	3	-	1	1	230	50/60	3NO+NO+NC	SGC1-D9511/W
		4	-	-	-	230	50/60	4NO	SGC1-D95004/W
		2	2	-	-	230	50/60	2NO+2NC	SGC1-D95008/W
		3	-	1	1	230	50/60	3NO+NO+NC	SGC1-D8011/W
	80	4	-	-	-	230	50/60	4NO	SGC1-D80004/W
		2	2	-	-	230	50/60	2NO+2NC	SGC1-D80008/W
		3	-	1	1	230	50/60	3NO+NO+NC	SGC1-D9511/W
		4	-	-	-	230	50/60	4NO	SGC1-D95004/W
	95	2	2	-	-	230	50/60	2NO+2NC	SGC1-D95008/W

## 2. Model explanation:



## 3. Refer to other coil voltage listed as followings:

Coil voltage(V)	24	36	48	110	127	220	230	240	380	415	440	480	500	600	660
50Hz	B5	C5	E5	F5	G5	M5	P5	U5	Q5	N5	R5	T5	S5	-	Y5
60Hz	B6	-	E6	F6	G6	M6	P6	U6	Q6	N6	R6	T6	-	S6	-
50/60Hz	B7	C7	E7	F7	G7	M7	P7	U7	Q7	N7	R7	T7	-	-	-

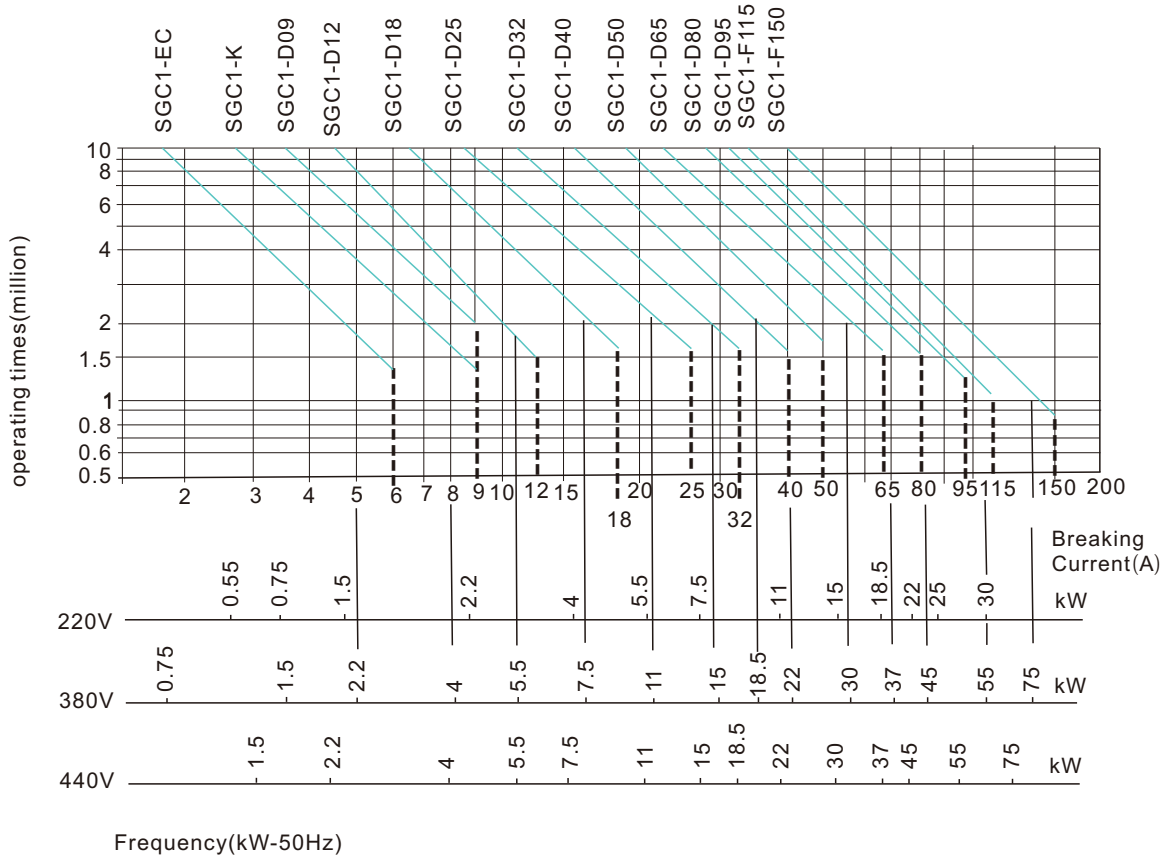
For technical data, see technical specifications for type SGC1-D/W Series

## Technical specifications for type SGC1-D/W Series

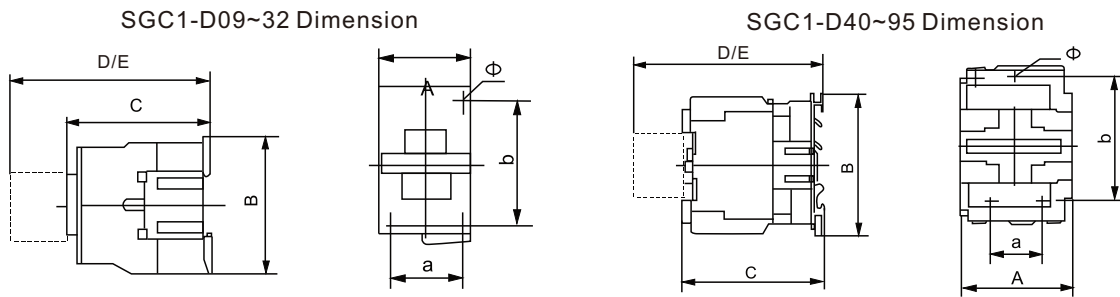


Type	SGC1-D09	SGC1-D12	SGC1-D18	SGC1-D25	SGC1-D32	SGC1-D40	SGC1-D50	SGC1-D65	SGC1-D80	SGC1-D95		
Number of poles	3,4	3,4	3	3,4	3	3,4	3,4	3,4	3,4	3,4		
Rated operational current(A)	380V	In AC-3	9	12	18	25	32	40	50	65	80	95
		In AC-4	3.5	5	7.7	8.5	12	18.5	24	28	37	44
	660V	In AC-3	6.6	8.9	12	18	21	34	39	42	49	55
		In AC-4	1.5	2	3.8	4.4	7.5	9	12	14	17.3	21.3
440V	In AC-1	20	25	32	40	50	60	80	80	110	125	
Rated conventional thermal current Ith(A)	25	25	32	40	50	60	80	80	125	125		
Rated making capacity(A)	400V	10 x Ie AC-3 or 12 x Ie AC-4										
Rated breaking capacity(A)	400V	8 x Ie AC-3 or 12 x Ie AC-4										
Rated operational power in category AC-3(kw)	220/230/240V	2.2	3	4	5.5	7.5	11	15	18.5	22	25	
	380/400V	4	5.5	7.5	11	15	18.5	22	30	37	45	
	415V	4	5.5	9	11	15	22	25	37	45	45	
	440V	4	5.5	9	11	15	22	30	37	45	45	
660/690V	5.5	7.5	10	15	18.5	30	33	37	45	45		
Average impedance per pole(mΩ)	2.5	2.5	2.5	2	2	1.5	1.5	1.5	0.8	0.8		
Add-on auxiliary contact blocks	Front	SGA1-DN										
	Side	LA8-DN										
	Front time delay	SGA2-DT/SGA3-DR										
	Front dust and damp protected	■										
Reversing contactor type	SGC2-D											
Associated thermal overload relays	SGR2-D13					SGR2-D23		SGR2-D33				
	Electrical AC-3	1200	1200	1200	1200	600	600	600	600	600	600	
Operation cycles (times/hour)	Electrical AC-4	300	300	300	300	300	300	300	300	300	300	
	Mechanical	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600	
	AC-3	1000	1000	1000	1000	800	800	600	600	600	600	
Elechanical life(X 10 <sup>3</sup> times)	AC-4	200	200	200	200	200	150	150	150	100	100	
	Mechanical life(X 10 <sup>6</sup> times)	10	10	10	10	8	8	8	8	6	6	
Matching fuse model	RT16-20	RT16-20	RT16-32	RT16-40	RT16-50	RT16-63	RT16-80	RT16-80	RT16-80	RT16-100	RT16-125	
Tightening torque(N.m)	1.7	1.7	1.7	2.5	2.5	5	5	5	5	9	9	
Connection												

### 1. Electrical life curve for AC contactor SGC1-D/W

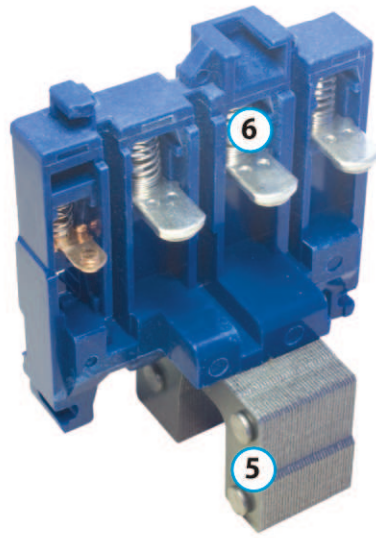
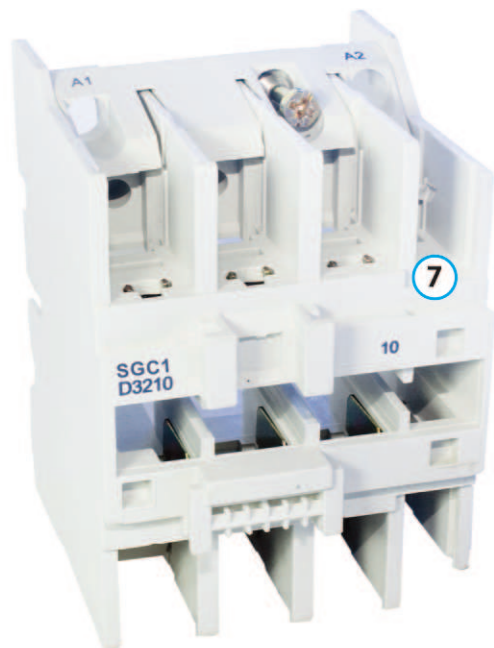


### 2. Overall and mounting dimensions (SGC1-D/W Series)



Type	A max	B max	C max	D max	E max	a	b	φ	
3P	SGC1-D09~12	47	76	82	113	133	34/35	50/60	2-/φ4.5
	SGC1-D18	47	76	87	118	138	34/35	50/60	2-/φ4.5
	SGC1-D25	57	86	95	126	146	40	48	2-/φ4.5
	SGC1-D32	57	86	100	131	151	40	48	2-/φ4.5
	SGC1-D40~65	77	129	116	145	165	40	100/110	3-/φ6.5
4P	SGC1-D80~95	87	129	127	156	176	40	100/110	3-/φ6.5
	SGC1-D09008W~12008W	47	76	82	113	133	34/35	50/60	2-/φ4.5
	SGC1-D25008W	57	86	95	126	146	40	48	2-/φ4.5
	SGC1-D40008W~65008W	86	129	116/129	145	165	40	100/110	3-/φ6.5
SGC1-D80008W~95008W	97	129	127/140	156	176	40	100/110	3-/φ6.5	

**SGC1-D/W Series AC CONTACTOR**



- BASE ①
- STATIC MAGNETIC CORE ②
- COIL ③
- REVERSE SPRING ④
- MOVABLE MAGNETIC CORE ⑤
- MOVABLE CONTACTS ⑥
- LID ⑦
- STATIC CONTACTS ⑧
- AUXILIARY CONTACT ⑨
- SCREWS ⑩
- TERMINAL PROTECTION CAPS ⑪

