















FGC1-D Series AC Contactor

Technical data

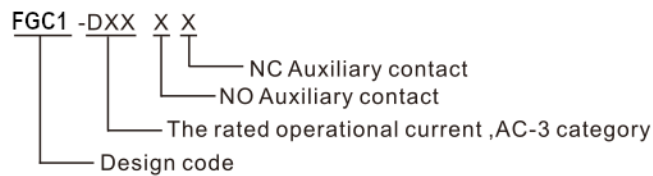
Standard	IEC60947-4-1	
Electric ratings	Up to 95A,690V	
Approvals	SEMKO, CE, CB, TUV	
Operation range	Pick-up voltage	(85%~110%) U _c
	Drop-out voltage	(20%~75%) U _c
Rated insulation voltage U _i (V)	690	
Rated impulse withstand voltage U _{imp} (kV)	6	
Rated frequency(Hz)	50/60	
Utilization category	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	FGC1-D0910
		3	-	-	1	230	50/60	3NO+NC	FGC1-D0901
		4	-	-	-	230	50/60	4NO	FGC1-D09004
		2	2	-	-	230	50/60	2NO+2NC	FGC1-D09008
	12	3	-	1	-	230	50/60	3NO+NO	FGC1-D1210
		3	-	-	1	230	50/60	3NO+NC	FGC1-D1201
		4	-	-	-	230	50/60	4NO	FGC1-D12004
		2	2	-	-	230	50/60	2NO+2NC	FGC1-D12008
	18	3	-	1	-	230	50/60	3NO+NO	FGC1-D1810
		3	-	-	1	230	50/60	3NO+NC	FGC1-D1801
		3	-	1	-	230	50/60	3NO+NO	FGC1-D2510
		3	-	-	1	230	50/60	3NO+NC	FGC1-D2501
	25	4	-	-	-	230	50/60	4NO	FGC1-D25004
		2	2	-	-	230	50/60	2NO+2NC	FGC1-D25008
		3	-	1	-	230	50/60	3NO+NO	FGC1-D3210
		3	-	-	1	230	50/60	3NO+NC	FGC1-D3201
	32	3	-	1	1	230	50/60	3NO+NO+NC	FGC1-D4011
		4	-	-	-	230	50/60	4NO	FGC1-D40004
		2	2	-	-	230	50/60	2NO+2NC	FGC1-D40008
		3	-	1	1	230	50/60	3NO+NO+NC	FGC1-D5011
	40	4	-	-	-	230	50/60	4NO	FGC1-D50004
		2	2	-	-	230	50/60	2NO+2NC	FGC1-D50008
		3	-	1	1	230	50/60	3NO+NO+NC	FGC1-D6511
		4	-	-	-	230	50/60	4NO	FGC1-D65004
	50	2	2	-	-	230	50/60	2NO+2NC	FGC1-D65008
		3	-	1	1	230	50/60	3NO+NO+NC	FGC1-D8011
		4	-	-	-	230	50/60	4NO	FGC1-D80004
		2	2	-	-	230	50/60	2NO+2NC	FGC1-D80008
	65	3	-	1	1	230	50/60	3NO+NO+NC	FGC1-D9511
		4	-	-	-	230	50/60	4NO	FGC1-D95004
		2	2	-	-	230	50/60	2NO+2NC	FGC1-D95008
		3	-	1	1	230	50/60	3NO+NO+NC	FGC1-D8011
	80	4	-	-	-	230	50/60	4NO	FGC1-D80004
		2	2	-	-	230	50/60	2NO+2NC	FGC1-D80008
		3	-	1	1	230	50/60	3NO+NO+NC	FGC1-D9511
		4	-	-	-	230	50/60	4NO	FGC1-D95004
	95	2	2	-	-	230	50/60	2NO+2NC	FGC1-D95008

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	-	-	-

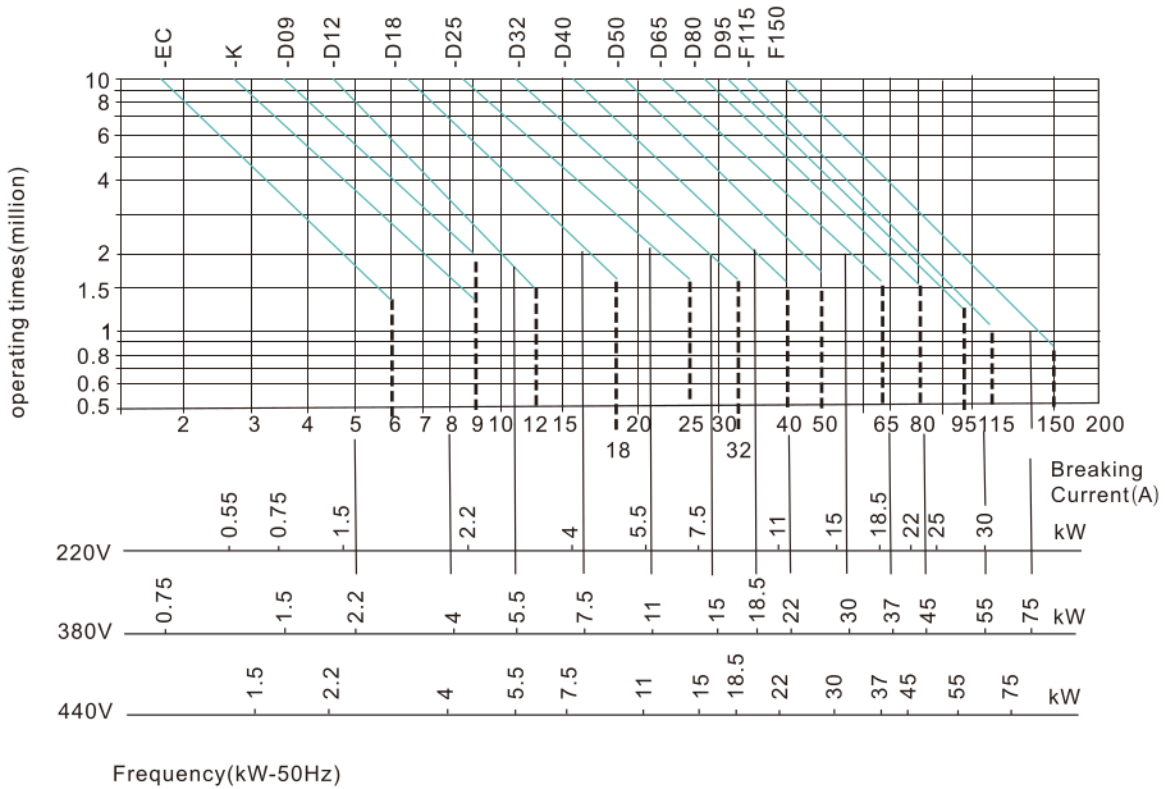
For technical data, see technical specifications for type **FGC1-D** Series

Technical specifications for FGC1-D Series

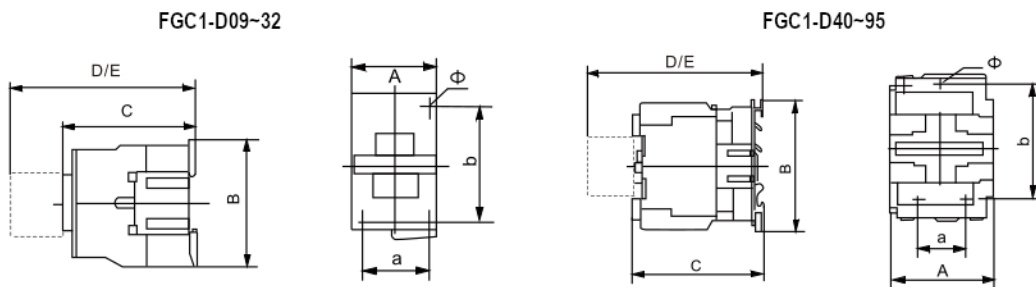


Type	FGC1-D											
	09	12	18	25	32	40	50	65	80	95		
Number of poles	3,4	3,4	3	3,4	3	3,4	3,4	3,4	3,4	3,4	3,4	
Rated operational current(A)	380V	In AC-3	9	12	18	25	32	40	50	65	80	95
		In AC-4	3.5	5	7.7	8.5	12	18.5	24	28	37	44
	660V	In AC-3	6.6	8.9	12	18	21	34	39	42	49	55
		In AC-4	1.5	2	3.8	4.4	7.5	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)	20	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	FGA1-DN										
	Side	FGA8-DN										
	Front time delay	FGA2-DT/SGA3-DR										
	Front dust and damp protected	■										
Reversing contactor type	FGC2-D											
Associated thermal overload relays	FGR2-D13				FGR1-D23	FGR2-D-33						
Operation cycles (times/hour)	Electrical AC-3	1200	1200	1200	1200	600	600	600	600	600	600	
	Electrical AC-4	300	300	300	300	300	300	300	300	300	300	
	Mechanical	3600	3600	3600	3600	3600	3600	3600	3600	3600	3600	
Elechanical life(X 10 ³ times)	AC-3	1000	1000	1000	1000	800	800	600	600	600	600	
	AC-4	200	200	200	200	200	150	150	150	100	100	
Mechanical life(X 10 ⁶ 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	RT16-100	RT16-125		
Tightening torque(N.m)	1.2	1.2	1.7	2.0	2.5	5	5	5	9	9		
Connection												

1. Electrical life curve for AC contactor FGC1-D



2. Overall and mounting dimensions (FGC1-D Series)



Type	A max	B max	C max	D max	E max	a	b	φ	
3P	FGC1-D09-12	47	76	82	113	133	34/35	50/60	2-φ4.5
	FGC1-D18	47	76	87	118	138	34/35	50/60	2-φ4.5
	FGC1-D25	57	86	95	126	146	40	48	2-φ4.5
	FGC1-D32	57	86	100	131	151	40	48	2-φ4.5
	FGC1-D40-65	77	129	116	145	165	40	100/110	3-φ6.5
4P	FGC1-D80-95	87	129	127	156	176	40	100/110	3-φ6.5
	FGC1-D09008-12008	47	76	82	113	133	34/35	50/60	2-φ4.5
	FGC1-D25008	57	86	95	126	146	40	48	2-φ4.5
	FGC1-D40008-65008	86	129	116/129	145	165	40	100/110	3-φ6.5
FGC1-D80008-95008	97	129	127/140	156	176	40	100/110	3-φ6.5	

FGP1-D Series DC Operated AC Contactors



Model	Rated operating current 380V AC-3(A)	Conventional thermal current(A)	Standard power ratings of 3phase motors 50-60Hz AC-3			Auxiliary contact		Type
			220V/230V (kW)	380V/400V (kW)	660V/690V (kW)			
FGP1-D0910	9	20	2.2	4	5.5	1	-	3P+NO
FGP1-D0901						-	1	3P+NC
FGP1-D1210	12	20	3	5.5	7.5	1	-	3P+NO
FGP1-D1201						-	1	3P+NC
FGP1-D1810	18	32	4	7.5	9	1	-	3P+NO
FGP1-D1801						-	1	3P+NC
FGP1-D2510	25	40	5.5	11	15	1	-	3P+NO
FGP1-D2501						-	1	3P+NC
FGP1-D3210	32	50	7.5	15	18.5	1	-	3P+NO
FGP1-D3201						-	1	3P+NC
FGP1-D4011	40	60	11	18.5	30	1	1	3P+NO+NC
FGP1-D5011	50	80	15	22	33	1	1	3P+NO+NC
FGP1-D6511	65	80	18.5	30	37	1	1	3P+NO+NC
FGP1-D8011	80	125	22	37	45	1	1	3P+NO+NC
FGP1-D9511	95	125	25	45	45	1	1	3P+NO+NC

F19 Series Contactor for Power Factor Contactors



Model	Rated Conventional Thermal Current Ith	Controllable power			Auxiliary contact	
		220V/230V (Kvar)	380V/400V (Kvar)	660V/690V (Kvar)		
FG19-2511	25	6	12	12	1	1
FG19-2502					-	2
FG19-2520					2	-
FG19-3211	32	8.5	16	16	1	1
FG19-3202					-	2
FG19-3220					2	-
FG19-4311	43	10	20	20	1	1
FG19-4302					-	2
FG19-4320					2	-
FG19-5012	50	12	25	25	1	2
FG19-5021					2	1
FG19-6312	63	15	30	30	1	2
FG19-6321					2	1
FG19-8012	80	22	37	37	1	2
FG19-8021					2	1
FG19-9512	95	23	45	45	1	2
FG19-9521					2	1
FG19-12512	125	25	50	50	1	2
FG19-12521					2	1