

SGC1-F Series

AC Contactor

Technical data

| | | |
|--|------------------------------|---------------|
| Standard | IEC60947-4-1 | |
| Electric ratings | Up to 800A, 1000V | |
| Approvals | CE | |
| Operation Range | Pick-up voltage | (85%~110%) Us |
| | Drop-out voltage | (20%~75%) Us |
| Rated insulation voltage Ui(V) | 1000 | |
| Rated impulse withstand voltage Uimp(kV) | 8 | |
| 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 | |



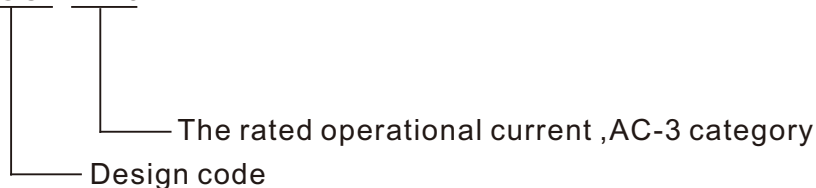
1. Technical specifications for type SGC1-F Series



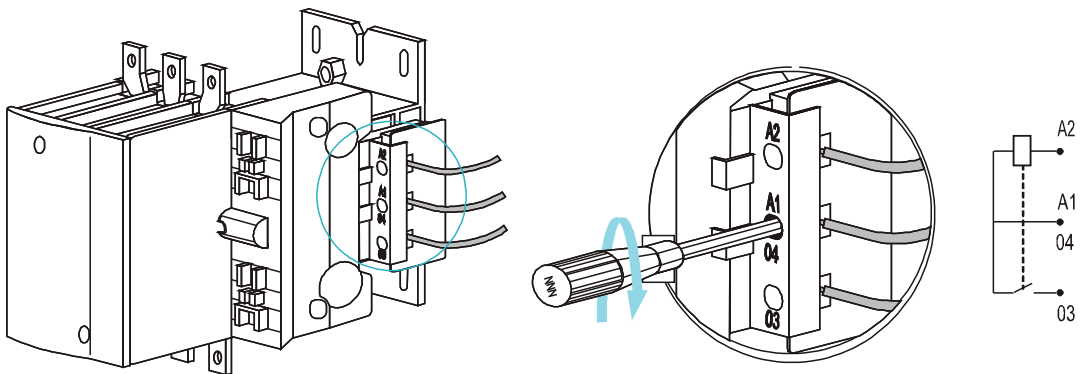
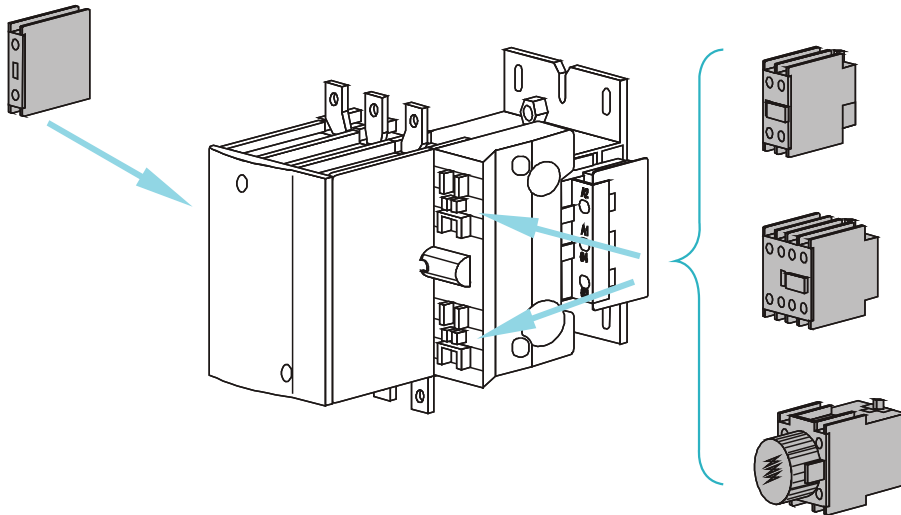
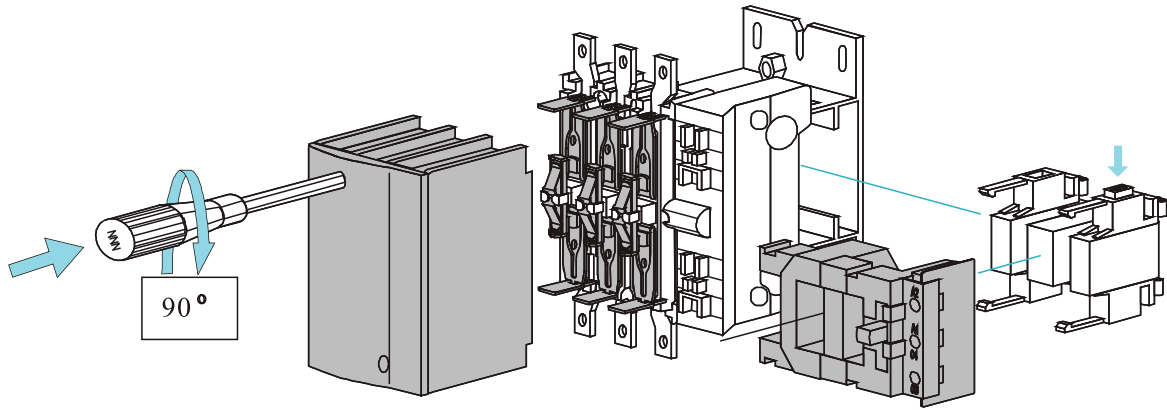
| Type | SGC1-F115 | SGC1-F150 | SGC1-F185 | SGC1-F225 | SGC1-F265 | SGC1-F330 | SGC1-F400 | SGC1-F500 | SGC1-F630 | SGC1-F780 | SGC1-F800 | |
|--|-------------------------------|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------|
| Number of poles | 3,4 | 3,4 | 3,4 | 3,4 | 3,4 | 2,3,4 | 2,3,4 | 2,3,4 | 2,3,4 | 2,3,4 | 3 | |
| current Ie(A) (Ue≤400V) | In AC-3 | 115 | 150 | 185 | 225 | 265 | 330 | 400 | 500 | 630 | 780 | 800 |
| | In AC-1 | 200 | 250 | 275 | 315 | 350 | 400 | 500 | 700 | 1000 | 1600 | 1000 |
| Rated conventional thermal current Ith(A) | 200 | 250 | 275 | 315 | 350 | 400 | 500 | 700 | 900 | 1600 | 1000 | |
| Rated making capacity(A) 1ms | 10 x In AC-3 or 12 x In AC-4 | | | | | | | | | | | |
| Rated breaking capacity(A) 1ms | 8 x In AC-3 or 10 x In AC-4 | | | | | | | | | | | |
| Rated operational power in category AC-3(kw) | 220/230V | 30 | 40 | 55 | 63 | 75 | 100 | 129 | 147 | 200 | 220 | 220 |
| | 380/400V | 55 | 75 | 90 | 100 | 132 | 160 | 200 | 250 | 335 | 400 | 400 |
| | 415V | 59 | 80 | 100 | 110 | 140 | 180 | 220 | 280 | 375 | 425 | 425 |
| | 440V | 59 | 80 | 100 | 110 | 140 | 180 | 220 | 280 | 375 | 425 | 425 |
| | 500V | 75 | 90 | 110 | 129 | 160 | 200 | 257 | 335 | 400 | 450 | 450 |
| | 660/690V | 80 | 100 | 120 | 129 | 180 | 220 | 280 | 355 | 450 | 475 | 475 |
| 1000V | 65 | 65 | 100 | 140 | 147 | 160 | 185 | 335 | 450 | 450 | 450 | |
| Average impedance per pole(mΩ) | 0.37 | 0.35 | 0.33 | 0.32 | 0.3 | 0.28 | 0.26 | 0.18 | 0.12 | 0.1 | 0.12 | |
| Add-on auxiliary contact blocks | Front | SGA1-DN | | | | | | | | | | |
| | Side | - | | | | | | | | | | |
| | Front time delay | SGA2-DT/SGA3-DR | | | | | | | | | | |
| | Front dust and damp protected | - | | | | | | | | | | |
| Operation cycles (times/hour) | AC-1,AC-2,AC-3 | 1200 | 1200 | 1200 | 1200 | 1200 | 600 | 600 | 600 | 600 | 600 | 600 |
| | AC-4 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 |
| Electrical life(X 10 ⁶ times) | 1.2 | 1.2 | 1 | 1 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.8 | 0.6 | |
| Mechanical life(X 10 ⁶ times) | 10 | 10 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 3 | |
| Matching fuse model | RT16-2 | RT16-2 | RT16-3 | RT16-3 | RT16-3 | RT16-3 | RT16-3 | RT16-3 | RT16-3 | RT16-3 | RT16-3 | |
| Tightening torque(N.m) cable connection | 10 | 18 | 18 | 35 | 35 | 35 | 35 | 35 | 58 | 58 | 58 | |

2. Model explanation:

SGC1-F115

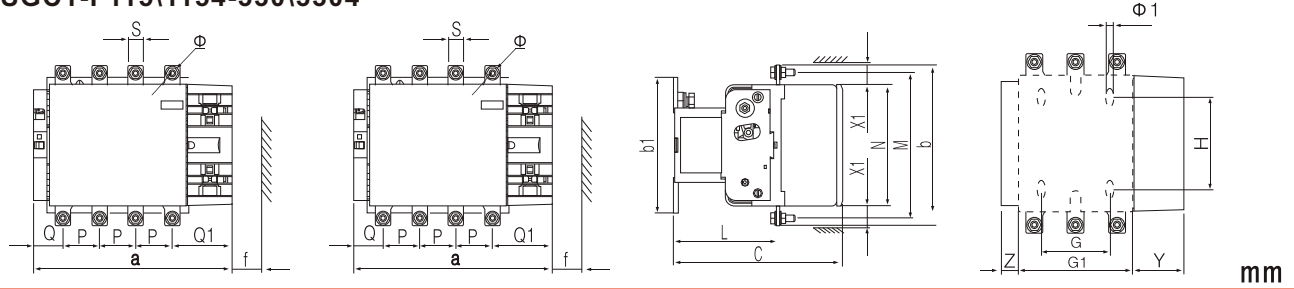


SGC1-F Series AC Contactor



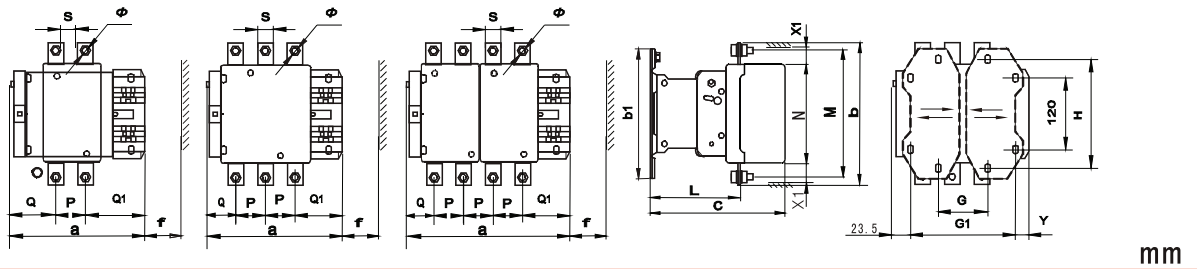
Overall and mounting dimensions(SGC1-F Series)

1.SGC1-F115\1154-330\3304



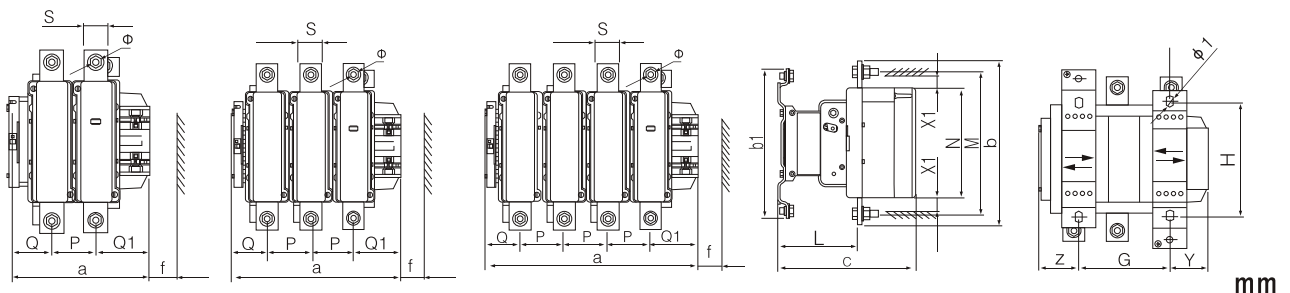
| SGC1-F | a | P | Q | Q1 | S | φ | f | b | b1 | M | N | C | L | G | H | φ1 | G1 | Z | Y | X1 | |
|--------|-------|----|------|------|----|-----|-----|-----|-----|-----|-----|-----|-------|----|---------|-----|-------|------|----|-------|-------|
| | | | | | | | | | | | | | | | | | | | | 500V≤ | >500V |
| 115 | 163.5 | 37 | 29.5 | 60 | 15 | M6 | 131 | 162 | 137 | 147 | 124 | 171 | 107 | 80 | 120-106 | 6.5 | 106 | 13.5 | 44 | 10 | 15 |
| 1154 | 200.5 | 37 | 29.5 | 60 | 15 | M6 | 131 | 162 | 137 | 147 | 124 | 171 | 107 | 80 | 120-106 | 6.5 | 143 | 13.5 | 44 | 10 | 15 |
| 150 | 163.5 | 40 | 26 | 57.5 | 20 | M8 | 131 | 170 | 137 | 150 | 124 | 171 | 107 | 80 | 120-106 | 6.5 | 106 | 13.5 | 44 | 10 | 15 |
| 1504 | 200.5 | 40 | 25 | 55.5 | 20 | M8 | 131 | 170 | 137 | 150 | 124 | 171 | 107 | 80 | 120-106 | 6.5 | 143 | 13.5 | 44 | 10 | 15 |
| 185 | 168.5 | 40 | 29 | 59.5 | 20 | M8 | 130 | 174 | 137 | 154 | 127 | 181 | 113.5 | 80 | 120-106 | 6.5 | 111 | 13.5 | 44 | 10 | 15 |
| 1854 | 208.5 | 40 | 29 | 59.5 | 20 | M8 | 130 | 174 | 137 | 154 | 127 | 181 | 113.5 | 80 | 120-106 | 6.5 | 151 | 13.5 | 44 | 10 | 15 |
| 225 | 168.5 | 48 | 21 | 51.5 | 25 | M10 | 130 | 197 | 137 | 172 | 127 | 181 | 113.5 | 80 | 120-106 | 6.5 | 111 | 13.5 | 44 | 10 | 15 |
| 2254 | 208.5 | 48 | 17 | 47.5 | 25 | M10 | 130 | 197 | 137 | 172 | 127 | 181 | 113.5 | 80 | 120-106 | 6.5 | 151 | 20.5 | 44 | 10 | 15 |
| 265 | 201.5 | 48 | 39 | 66.5 | 25 | M10 | 147 | 203 | 145 | 178 | 147 | 213 | 141 | 96 | 120-106 | 6.5 | 140 | 20.5 | 38 | 10 | 15 |
| 2654 | 244.5 | 48 | 34 | 66.5 | 25 | M10 | 147 | 203 | 145 | 178 | 147 | 213 | 141 | 96 | 120-106 | 6.5 | 186 | 20.5 | 38 | 10 | 15 |
| 330 | 213 | 48 | 43 | 74 | 25 | M10 | 147 | 206 | 145 | 181 | 158 | 219 | 145 | 96 | 120-106 | 6.5 | 154.5 | 20.5 | 38 | 10 | 15 |
| 3304 | 261 | 48 | 43 | 74 | 25 | M10 | 147 | 206 | 145 | 181 | 158 | 219 | 145 | 96 | 120-106 | 6.5 | 202.5 | 20.5 | 38 | 10 | 15 |

2.SGC1-F400\4004\4002\500\5004\5002



| SGC1-F | a | P | Q | Q1 | S | φ | f | b | b1 | M | N | C | L | G | G1 | H | φ1 | Y | X1 | |
|--------|-----|----|----|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|--------------|---------------|-----|-----|------|-------|-------|
| | | | | | | | | | | | | | | | | | | | 500V≤ | >500V |
| 4002 | 213 | 48 | 69 | 96 | 25 | M10 | 151 | 206 | 209 | 181 | 158 | 219 | 145 | 80 (66-102) | 170 (156-192) | 180 | 8.5 | 19.5 | 15 | 20 |
| 400 | 213 | 48 | 43 | 74 | 25 | M10 | 151 | 206 | 209 | 181 | 158 | 219 | 145 | 80 (66-102) | 170 (156-192) | 180 | 8.5 | 19.5 | 15 | 20 |
| 4004 | 261 | 48 | 43 | 74 | 25 | M10 | 151 | 206 | 209 | 181 | 158 | 219 | 145 | 80 (66-150) | 170 (156-240) | 180 | 8.5 | 67.5 | 15 | 20 |
| 5002 | 233 | 50 | 76 | 102 | 30 | M10 | 169 | 238 | 209 | 208 | 172 | 232 | 146 | 80 (66-120) | 170 (156-210) | 180 | 8.5 | 39.5 | 15 | 20 |
| 500 | 233 | 50 | 46 | 77 | 30 | M10 | 169 | 238 | 209 | 208 | 172 | 232 | 146 | 80 (66-120) | 170 (156-210) | 180 | 8.5 | 39.5 | 15 | 20 |
| 5004 | 288 | 50 | 46 | 77 | 30 | M10 | 169 | 238 | 209 | 208 | 172 | 232 | 146 | 140 (66-175) | 230 (156-265) | 180 | 8.5 | 39.5 | 15 | 20 |

3.SGC1-F630\6304\800



| SGC1-F | a | P | Q | Q1 | S | φ | f | b | b1 | M | N | C | L | G | H | φ1 | Z | Y | X1 | |
|--------|-----|----|-----|-----|----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|-----|------|------|------|-------|-------|
| | | | | | | | | | | | | | | | | | | | 500V≤ | >500V |
| 6302 | 309 | 80 | 102 | 127 | 40 | M12 | 201 | 304 | 280 | 264 | 202 | 255 | 155 | 180 (100-195) | 185 | 10.5 | 60.5 | 68.5 | 20 | 25 |
| 630 | 309 | 80 | 60 | 89 | 40 | M12 | 201 | 304 | 280 | 264 | 202 | 255 | 155 | 180 (100-195) | 185 | 10.5 | 60.5 | 68.5 | 20 | 25 |
| 6304 | 309 | 80 | 60 | 89 | 40 | M12 | 201 | 304 | 280 | 264 | 202 | 255 | 155 | 240 (150-275) | 185 | 10.5 | 60.5 | 68.5 | 20 | 25 |
| 800 | 309 | 80 | 60 | 89 | 40 | M12 | 201 | 304 | 280 | 264 | 202 | 255 | 155 | 180 (100-195) | 185 | 10.5 | 60.5 | 68.5 | 20 | 25 |