

Control circuit characteristics with LX1 or LX9 coil								
Contactor type			LC1 F115	LC1 F150	LC1 F185	LC1 F225	LC1 F265	
Rated control circuit voltage (Uc)		50 or 60 Hz	V	24...1000				
Control voltage limits (θ ≤ 55 °C) 50 or 60 Hz coils	Operation		0.85...1.1 Uc				–	
	Drop-out		0.35...0.55 Uc				–	
	40...400 Hz coils	Operation	–				0.85...1.1 Uc	
		Drop-out	–				0.35...0.55 Uc	
Average consumption at 20 °C and at Uc								
~ 50 Hz Inrush	50 Hz coil	VA	550	550	805	805	–	
	40...400 Hz coil	VA	–	–	–	–	650	
	Cos φ		0.3	0.3	0.3	0.3	0.9	
	Sealed	50 Hz coil	VA	45	45	55	55	–
		40...400 Hz coil	VA	–	–	–	–	10
		Cos φ		0.3	0.3	0.3	0.3	0.9
	~ 60 Hz Inrush	60 Hz coil	VA	660	660	970	970	–
		40...400 Hz coil	VA	–	–	–	–	650
		Cos φ		0.3	0.3	0.3	0.3	0.9
	Sealed	60 Hz coil	VA	55	55	66	66	–
		40...400 Hz coil	VA	–	–	–	–	10
		Cos φ		0.3	0.3	0.3	0.3	0.9
Heat dissipation		W	12...16	12...16	18...24	18...24	8	
Operating time ⁽¹⁾	Closing "C"	ms	23...35	23...35	20...35	20...35	40...65	
	Opening "O"	ms	5...15	5...15	7...15	7...15	100...170	
Mechanical durability at Uc		In millions of operating cycles	10	10	10	10	10	
Maximum operating rate at ambient temperature ≤ 55 °C		In operating cycles per hour	2400	2400	2400	2400	2400	
Connection			Min/max c.s.a.					
Flexible cable without cable end	1 or 2 conductors	mm²	1/4	1/4	1/4	1/4	1/4	
	Flexible cable with cable end	1 conductor	mm²	1/4	1/4	1/4	1/4	
	2 conductors	mm²	1/2.5	1/2.5	1/2.5	1/2.5	1/2.5	
	Solid cable without cable end	1 or 2 conductors	mm²	1/4	1/4	1/4	1/4	
Tightening torque		N.m	1.2	1.2	1.2	1.2	1.2	
Mechanical latching			Mechanical latch blocks LA6 DK must not be fitted on LC1 F contactors. For similar type of operation, use magnetic latching contactors CR1 F. See pages B9/30 to B9/35.					

(1) The closing time "C" is measured from the moment the coil supply is switched on to initial contact of the main poles. The opening time "O" is measured from the moment the coil supply is switched off to the moment the main poles separate.

(2) Control circuit characteristics with LX1 coil.

TeSys contactors

TeSys F contactors

Utilisation category AC-3 (115 to 1000 A),

AC-1 (200 to 2600 A)

Control circuit: a.c. supply

TeSys F

LC1 F330	LC1 F400	LC1 F500	LC1 F630	LC1 F780	LC1 F800	LC1 F1000	LC1 F1250	LC1 F1400	LC1 F1700	LC1 F2100	LC1 F2600
24...1000	48...1000		48...1000	110...500	110...400	110...500 ⁽²⁾	110...600	110...500 ⁽²⁾	110...500 ⁽²⁾	110...500 ⁽²⁾	110...500 ⁽²⁾
—											
—											
0.85...1.1 Uc	0.85...1.1 Uc		0.85...1.1 Uc	0.85...1.1 Uc	0.85...1.1 Uc	0.85...1.1 Uc	0.85...1.1 Uc	0.85...1.1 Uc	0.85...1.1 Uc	0.85...1.1 Uc	0.85...1.1 Uc
0.35...0.55 Uc	0.3...0.5 Uc		0.25...0.5 Uc	0.2...0.4 Uc	0.3...0.5 Uc	0.3...0.5 Uc	0.25...0.5 Uc	0.3...0.5 Uc	0.3...0.5 Uc	0.3...0.5 Uc	0.3...0.5 Uc
—	—	—	—	—	—	—	—	—	—	—	—
650	1075	1100	1650	2100	1700	2200	1650	2200	2200	2200	2500
0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
—	—	—	—	—	—	—	—	—	—	—	—
10	15	18	22	50	12	36	22	36	36	36	45
0.9	0.9	0.9	0.9	0.9	—	0.9	0.9	0.9	0.9	0.9	0.9
—	—	—	—	—	—	—	—	—	—	—	—
650	1075	1100	1650	2100	1700	2200	1650	2200	2200	2200	2500
0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
—	—	—	—	—	—	—	—	—	—	—	—
10	15	18	22	50	12	36	22	36	36	36	45
0.9	0.9	0.9	0.9	0.9	—	0.9	0.9	0.9	0.9	0.9	0.9
8	14	18	20	2 x 22	25	2 x 18	20	2 x 18	2 x 18	2 x 18	2 x 25
40...65	40...75	40...75	40...80	40...80	60...80	40...75	40...80	40...75	40...75	40...75	40...80
100...170	100...170	100...170	100...200	130...230	150...180	100...170	100...200	100...170	100...170	100...170	100...200
10	10	10	5	5	5	0.5	1	0.5	0.5	0.5	0.5
2400	2400	2400	1200	600	600	600	1200	600	600	600	600
Min/max c.s.a.											
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1/2.5	1/2.5	1/2.5	1/2.5	1/2.5	1/2.5	1/2.5	1/2.5	1/2.5	1/2.5	1/2.5	1/2.5
1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4	1/4
1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2

Mechanical latch blocks LA6 DK must not be fitted on LC1 F contactors.

For similar type of operation, use magnetic latching contactors CR1 F.

See pages B9/30 to B9/35.

Control circuit characteristics with LX4 coil						
Contactor type		LC1 F115	LC1 F150	LC1 F185	LC1 F225	LC1 F265
Rated control circuit voltage (Uc) ---	V	24...460	24...460	24...460	24...460	24...460
Control voltage limits (θ ≤ 55 °C)	Operation	0.85...1.1 Uc	0.85...1.1 Uc	0.85...1.1 Uc	0.85...1.1 Uc	0.85...1.1 Uc
	Drop-out	0.15...0.2 Uc	0.15...0.2 Uc	0.15...0.2 Uc	0.15...0.2 Uc	0.15...0.2 Uc
Average consumption at 20 °C and at Uc	Inrush	W	560	560	800	800
	Sealed	W	4.5	4.5	5	5
Average operating time at Uc ⁽¹⁾	Closing "C"	ms	30...40	30...40	30...40	40...50
	Opening "O"	ms	30...50	30...50	30...50	40...65
Note: the arcing time depends on the circuit switched by the poles. For all normal 3-phase applications, the arcing time is less than 10 ms. The load is isolated from the supply after a time equal to the sum of the opening time and the arcing time.						
Mechanical durability at Uc	In millions of operating cycles		10	10	10	10
Maximum operating rate at ambient temperature ≤ 55 °C	In operating cycles per hour		2400	2400	2400	2400
Cabling			Min/max c.s.a.			
Flexible cable without cable end	1 conductor	mm ²	1/4	1/4	1/4	1/4
	2 conductors	mm ²	1/4	1/4	1/4	1/4
Flexible cable with cable end	1 conductor	mm ²	1/4	1/4	1/4	1/4
	2 conductors	mm ²	1/2.5	1/2.5	1/2.5	1/2.5
Solid cable without cable end	1 conductor	mm ²	1/4	1/4	1/4	1/4
	2 conductors	mm ²	1/4	1/4	1/4	1/4
Tightening torque		N.m	1.2	1.2	1.2	1.2
Mechanical latching	Mechanical latch blocks LA6 DK must not be fitted on LC1 F contactors. For similar type of operation, use magnetic latching contactors CR1 F. See pages B9/30 to B9/35.					

(1) The operating times depend on the type of contactor electromagnet and its control mode. The closing time "C" is measured from the moment the coil supply is switched on to initial contact of the main poles. The opening time "O" is measured from the moment the coil supply is switched off to the moment the main poles separate.