

# TeSys™ F-Line Contactors and Starters

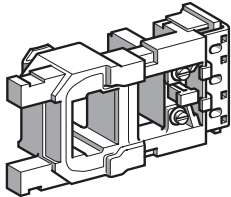
## Selection - Coils

### Contactors Type LC1F

#### Coils for LC1F115 to F225, AC supply 50 to 60 Hz

Maximum ambient air temperature: 55 °C (131 °F); above this, use an **LX9F** coil, see page 208 to 209.  
Operating cycles/hour ( $\theta \leq 55$  °C [131 °F]):  $\leq 2400$ .

Control Circuit Voltage		Average resistance at 20 °C (68 °F) $\pm 10\%$	Inductance of Closed Circuit	Voltage Code	Catalog Number	Weight lb (kg)
Vc 50 Hz	Vc 60 Hz					
V	V	$\Omega$	H			



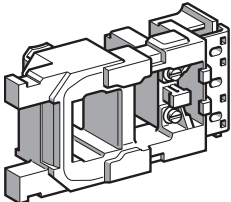
LX1FF...

#### For Contactors LC1F115 and LC1F150

24	–	0.27	0.04	B5	LX1FF024	0.95 (0.430)
42	–	0.94	0.13	–	LX1FF042	0.95 (0.430)
–	48	0.78	0.11	E6	LX1FF040	0.95 (0.430)
48	–	1.17	0.16	E5	LX1FF048	0.95 (0.430)
–	110	4.55	0.59	F6	LX1FF092	0.95 (0.430)
–	115/120	4.77	0.64	G6	LX1FF095	0.95 (0.430)
110/115	–	6.38	0.86	F5	LX1FF110	0.95 (0.430)
127	–	9.14	1.15	G5	LX1FF127	0.95 (0.430)
–	200/208	14.5	1.87	L6	LX1FF162	0.95 (0.430)
–	220	18.4	2.38	M6	LX1FF184	0.95 (0.430)
–	230/240	18.9	2.5	U6	LX1FF187	0.95 (0.430)
220/230	265/277	28.1	3.44	M5	LX1FF220	0.95 (0.430)
240	–	31.1	4.1	U5	LX1FF240	0.95 (0.430)
–	380	57.2	7.05	Q6	LX1FF316	0.95 (0.430)
–	415	67.9	8.21	N6	LX1FF340	0.95 (0.430)
–	440	72.6	9.21	R6	LX1FF360	0.95 (0.430)
380/400	460/480	86.9	10.3	Q5	LX1FF380	0.95 (0.430)
415/440	–	95.1	12	N5	LX1FF415	0.95 (0.430)
500	–	141	17	S5	LX1FF500	0.95 (0.430)
–	660	172	20.3	Y6	LX1FF550	0.95 (0.430)
660	–	254	28.9	Y5	LX1FF660	0.95 (0.430)
–	1000	414	48.9	–	LX1FF850	0.95 (0.430)
1000	–	610	68.5	–	LX1FF1000	0.95 (0.430)

#### Specifications

Average consumption at 20 °C (68 °F):  
- inrush 50 Hz: 550 VA; 60 Hz: 660 VA.  
- sealed 50 Hz: 45 VA; 60 Hz: 55 VA,  $\cos \varphi = 0.32$ .  
Heat dissipation: 12 to 16 W  
Operating time at Vc: closing = 23 to 35 ms; Opening = 5 to 15 ms



LX1FG...

#### For Contactors LC1F185 and LC1F225

24	–	0.18	0.03	B5	LX1FG024	1.21 (0.550)
42	–	0.57	0.09	–	LX1FG042	1.21 (0.550)
–	48	0.47	0.08	E6	LX1FG040	1.21 (0.550)
48	–	0.71	0.12	E5	LX1FG048	1.21 (0.550)
–	110	2.74	0.44	F6	LX1FG092	1.21 (0.550)
–	115/120	2.87	0.49	G6	LX1FG095	1.21 (0.550)
110/115	–	4.18	0.65	F5	LX1FG110	1.21 (0.550)
127	–	5.35	0.86	G5	LX1FG127	1.21 (0.550)
–	200/208	8.8	1.41	L6	LX1FG162	1.21 (0.550)
–	220	11.1	1.8	M6	LX1FG184	1.21 (0.550)
–	230/240	11.4	1.87	U6	LX1FG187	1.21 (0.550)
220/230	265/277	16.5	2.59	M5	LX1FG220	1.21 (0.550)
240	–	20.1	3.09	U5	LX1FG240	1.21 (0.550)
–	380	34	5.32	Q6	LX1FG316	1.21 (0.550)
–	415	40.8	6.2	N6	LX1FG340	1.21 (0.550)
–	440	43.5	6.94	R6	LX1FG360	1.21 (0.550)
380/400	460/480	51.3	7.75	Q5	LX1FG380	1.21 (0.550)
415/440	–	62.3	9.06	N5	LX1FG415	1.21 (0.550)
500	–	82.7	12.8	S5	LX1FG500	1.21 (0.550)
–	660	103	15.3	Y6	LX1FG550	1.21 (0.550)
660	–	154	21.8	Y5	LX1FG660	1.21 (0.550)
–	1000	249	36.6	–	LX1FG850	1.21 (0.550)
1000	–	370	51.6	–	LX1FG1000	1.21 (0.550)

#### Specifications

Average consumption at 20 °C (68 °F):  
- inrush 50 Hz: 805 VA; 60 Hz: 970 VA.  
- sealed 50 Hz: 55 VA; 60 Hz: 66 VA,  $\cos \varphi = 0.34$ .  
Heat dissipation: 18 to 24 W  
Operating time at Vc: closing = 20 to 35 ms; Opening = 7 to 15 ms

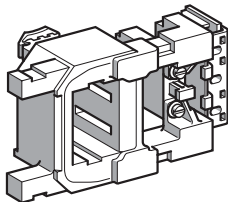
# TeSys™ F-Line Contactors and Starters Selection - Coils

## Contactors Type LC1F Coils for LC1F265 to F500, AC supply 40 to 400 Hz

Low sealed consumption.  
Operate on networks with harmonic numbers  $\leq 7$   
Operating cycles/hour ( $\theta \leq 55^\circ\text{C}$  [ $131^\circ\text{F}$ ])  $\leq 2400$ .

Control circuit voltage Vc	Average resistance at 20 °C (68 °F) $\pm 10\%$		Inductance of Closed Circuit	Voltage Code	Catalog Number	Weight lb (kg)
	Inrush	Sealed				
V	$\Omega$	$\Omega$	H			

### For Contactors LC1F265 and LC1F330

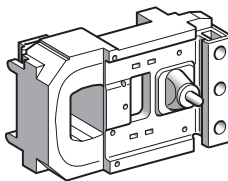


LX1FH...2

24	0.8	20	■	B7	LX1FH0242	1.65 (0.750)
48	2.96	72	■	E7	LX1FH0482	1.65 (0.750)
110/115	18.7	415	■	F7	LX1FH1102	1.65 (0.750)
120/127	22.9	536	■	G7	LX1FH1272	1.65 (0.750)
200/208	57.8	1285	■	L7	LX1FH2002	1.65 (0.750)
220/230	71.6	1621	■	M7	LX1FH2202	1.65 (0.750)
240	71.6	1621	■	U7	LX1FH2402	1.65 (0.750)
277	114.3	2425	■	W7	LX1FH2772	1.65 (0.750)
380/415	222	5075	■	Q7	LX1FH3802	1.65 (0.750)
480/500	345	7990	■	S7	LX1FH5002	1.65 (0.750)
600/660	521	11 988	■	X7	LX1FH6002	1.65 (0.750)
1000	1218	30 124	■	-	LX1FH10002	1.65 (0.750)

#### Specifications

Average consumption at 20 °C (68 °F) for 50 or 60 Hz and  $\cos \varphi = 0.9$ :  
- inrush: 600 to 700 VA.  
- sealed: 8 to 10 VA.  
Heat dissipation: 8 W  
Operating time at Vc: closing = 40 to 65 ms; Opening = 100 to 170 ms



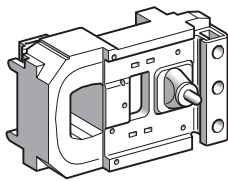
LX1FJ...3

### For Contactor LC1F400

48	1.6	29.5	0.18	E7	LX1FJ048	2.20 (1.000)
110/120	9.8	230	1.35	F7	LX1FJ110	2.20 (1.000)
127	12.8	280	1.75	G7	LX1FJ127	2.20 (1.000)
200/208	30	815	4.1	L7	LX1FJ200	2.20 (1.000)
220/230	37	1030	5.1	M7	LX1FJ220	2.20 (1.000)
230/240	47.5	1320	6.4	U7	LX1FJ240	2.20 (1.000)
265/277	61	1700	8.1	W7	LX1FJ280	2.20 (1.000)
380/400	120	3310	15.8	Q7	LX1FJ380	2.20 (1.000)
415/480	145	4070	19.4	N7	LX1FJ415	2.20 (1.000)
500	190	4980	25.5	S7	LX1FJ500	2.20 (1.000)
550/600	243	6310	27.4	X7	LX1FJ600	2.20 (1.000)
1000	720	19 420	84.6	-	LX1FJ1000	2.20 (1.000)

#### Specifications

Average consumption at 20 °C (68 °F) for 50 or 60 Hz and  $\cos \varphi = 0.9$ :  
- inrush: 1000 to 1150 VA.  
- sealed: 12 to 18 VA.  
Heat dissipation: 14 W  
Operating time at Vc: closing = 40 to 75 ms; Opening = 100 to 170 ms



LX1FK...3

### For Contactor LC1F500

48	1.9	33.5	0.19	E7	LX1FK048	2.53 (1.150)
110/120	9.55	260	1.25	F7	LX1FK110	2.53 (1.150)
127	11.5	315	1.5	G7	LX1FK127	2.53 (1.150)
200/208	29	735	3.75	L7	LX1FK200	2.53 (1.150)
220/230	35.5	915	4.55	M7	LX1FK220	2.53 (1.150)
230/240	44.5	1160	5.75	U7	LX1FK240	2.53 (1.150)
265/277	56.5	1490	7.3	W7	LX1FK280	2.53 (1.150)
380/400	112	2980	14.7	Q7	LX1FK380	2.53 (1.150)
415/480	143	3730	18.4	N7	LX1FK415	2.53 (1.150)
500	172	4590	22.8	S7	LX1FK500	2.53 (1.150)
550/600	232	5660	23.9	X7	LX1FK600	2.53 (1.150)
1000	679	16 960	72	-	LX1FK1000	2.53 (1.150)

#### Specifications

Average consumption at 20 °C (68 °F) for 50 or 60 Hz,  $\cos \varphi = 0.9$ :  
- inrush: 1050 to 1150 VA.  
- sealed: 16 to 20 VA.  
Heat dissipation: 18 W  
Operating time at Vc: closing = 40 to 75 ms; Opening = 100 to 170 ms

■ Please consult your Local Square D Field Sales Office.

# TeSys™ F-Line Contactors and Starters

## Selection - Coils

### Contactors Type LC1F

#### Coils for LC1F630 to F800, AC supply 40 to 400 Hz

Low sealed consumption.  
Operate on networks with harmonic numbers  $\leq 7$ .

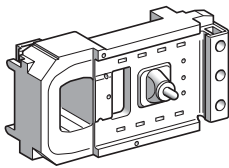
Control circuit voltage Vc	Average resistance at 20 °C (68 °F) $\pm 10\%$		Inductance of Closed Circuit	Voltage Code	Catalog Number	Weight lb (kg)
	Inrush	Sealed				
V	$\Omega$	$\Omega$	H			

#### For Contactor LC1F630

48	1.1	17.1	0.09	E7	LX1FL048	3.30 (1.500)
110/120	6.45	165	1.85	F7	LX1FL110	3.30 (1.500)
127	8.1	205	1.05	G7	LX1FL127	3.30 (1.500)
200/208	20.5	605	2.65	L7	LX1FL200	3.30 (1.500)
220/240	25.5	730	3.35	M7	LX1FL220	3.30 (1.500)
265/277	31	900	4.1	W7	LX1FL260	3.30 (1.500)
380/400	78	2360	10.5	Q7	LX1FL380	3.30 (1.500)
415/480	96	2960	13	N7	LX1FL415	3.30 (1.500)
500	120	3660	16.5	S7	LX1FL500	3.30 (1.500)
550/600	155	4560	19.5	X7	LX1FL600	3.30 (1.500)
1000	474	12 880	56.2	-	LX1FL1000	3.30 (1.500)

#### Specifications

Average consumption at 20 °C (68 °F) for 50 or 60 Hz,  $\cos \phi = 0.9$ :  
 - inrush: 1500 to 1730 VA.  
 - sealed: 20 to 25 VA.  
 Operating cycles/hour ( $\theta \leq 55$  °C [131 °F]): 1200.  
 Heat dissipation: 20 W  
 Operating time at Vc: closing = 40 to 80 ms; Opening = 100 to 200 ms



LX1FL●●●

#### For Contactor LC1F780

Replacement rectifier for use with LX1FX●●● coils: DR5TX5S.

110/120	4.95 ▲	230 ▲	0.21	F7	LX1FX110 ■	6.61 (3.000)
127	6.1 ▲	280 ▲	0.26	G7	LX1FX127 ■	6.61 (3.000)
200/208	15.5 ▲	750 ▲	0.66	L7	LX1FX200 ■	6.61 (3.000)
220/240	19.5 ▲	920 ▲	0.82	M7	LX1FX220 ■	6.61 (3.000)
265/277	29.8 ▲	1330 ▲	1.25	W7	LX1FX280 ■	6.61 (3.000)
380	60.9 ▲	2780 ▲	2.3	Q7	LX1FX380 ■	6.61 (3.000)
415/480	74.3 ▲	3340 ▲	2.8	N7	LX1FX415 ■	6.61 (3.000)
500	92 ▲	4180 ▲	3.5	S7	LX1FX500 ■	6.61 (3.000)

#### Specifications

Average consumption at 20 °C (68 °F) for 50 or 60 Hz,  $\cos \phi = 0.9$ :  
 - inrush: 1900 to 2300 VA.  
 - sealed: 44 to 55 VA.  
 Operating cycles/hour ( $\theta \leq 55$  °C [131 °F]): 600.  
 Heat dissipation: 2 x 22 W  
 Operating time at Vc: closing = 40 to 80 ms; Opening = 130 to 230 ms

#### For Contactor LC1F800

110/127	-	-	-	FW	LX4F8FW *	3.64 (1.650)
220/240	-	-	-	MW	LX4F8MW *	3.64 (1.650)
380/440	-	-	-	QW	LX4F8QW *	3.64 (1.650)

#### Specifications

Operating cycles/hour ( $\theta \leq 55$  °C [131 °F]): 600.  
 Heat dissipation: 25 W  
 Operating time at Vc: closing = 40 to 80 ms; Opening = 20 to 40 ms

- Catalog number includes a set of 2 identical coils, to be connected in series.
- ▲ Value for the 2 coils in series.
- \* Coil circuit requires a separately mounted rectifier catalog number DR5 TE4U.