

Product data sheet

Characteristics

LC1F185P7

Tesys F contactor - 3P (3 NO) - AC-3 - 440 V
185 A - bobina 230 V AC



Principal

Gama	TeSys
Gama de produse	TeSys F
Tip produs sau componenta	Contactator
Nume scurt al dispozitivului	LC1F
Aplicatie contactor	Sarcina rezistiva Comanda motor
Categorie de utilizare	AC-4 AC-3 AC-1
Descriere poli	3P
[Ue] tensiune nominala de functionare	<= 460 V c.c. <= 690 V c.a. 50/60 Hz
[Uc] tensiune circuit de comanda	230 V c.a. 40...400 Hz
[Ie] curent nominal de utilizare	275 A (at <40 °C) at <= 440 V AC-1 185 A (at <55 °C) at <= 440 V AC-3

Suplimentar

[Uimp] tensiune de tinere la impuls	8 kV
[Ith] curent termic conventional in aer liber	275 A (at 40 °C)
Capacitate de rupere nominala	1480 A conforming to IEC 60947-4-1
[Icw] curent nominal de scurtcircuit admisibil	1500 A 40 °C - 10 s 920 A 40 °C - 30 s 740 A 40 °C - 1 min 500 A 40 °C - 3 min 400 A 40 °C - 10 min
Calibrul fuzibilului asociat	200 A aM at <= 440 V 315 A gG at <= 440 V
Impedanta medie	0,33 mOhm - Ith 275 A 50 Hz
[Ui] tensiune nominala de izolare	1000 V conformitate cu IEC 60947-4-1 1500 V conformitate cu VDE 0110 grupa C
Puterea disipata pe pol	12 W AC-3 25 W AC-1
Categorie de supratensiune	III
Power pole contact composition	3 NO
Putere motor kW	90 KW at 380...400 V c.a. 50/60 Hz (AC-3) 100 KW at 415 V c.a. 50/60 Hz (AC-3) 100 KW at 440 V c.a. 50/60 Hz (AC-3) 110 KW at 500 V c.a. 50/60 Hz (AC-3) 110 KW at 660...690 V c.a. 50/60 Hz (AC-3) 55 KW at 220...230 V c.a. 50/60 Hz (AC-3) 33 kW at 400 V c.a. 50/60 Hz (AC-4)
Limite de tensiune circuit de comanda	Operational 0,85...1,1 Uc 40...400 Hz(Ia55 °C) Eliminare 0.2...0.55 Uc 40...400 Hz(Ia55 °C)
Durabilitate mecanica	10 Mcycles
Varf de putere in VA	1070 VA, 40...400 Hz 0,9 20 °C)
Puterea consumată la menținere în VA	9,9 VA, 40...400 Hz 0,9 20 °C)
Viteza maxima de functionare	2400 cic/h la <55 °C

Timp de functionare	35 ms închidere (la Uc) 130 ms deschidere (la Uc)
Conexiuni - borne	Circuit de comanda borne cu surub 1 cablu(ri) 1...4 mm ² flexibil fara Circuit de comanda borne cu surub 2 cablu(ri) 1...4 mm ² flexibil fara Circuit de comanda borne cu surub 1 cablu(ri) 1...4 mm ² flexibil cu Circuit de comanda borne cu surub 2 cablu(ri) 1...2,5 mm ² flexibil cu Circuit de comanda borne cu surub 1 cablu(ri) 1...4 mm ² solid fara Circuit de comanda borne cu surub 2 cablu(ri) 1...4 mm ² solid fara Circuit de alimentare bara 2 cablu(ri) - secțiune bare: 25 x 3 mm Circuit de alimentare terminale cu papuci 1 cablu(ri) 150 mm ² Circuit de alimentare conector 1 cablu(ri) 150 mm ² Circuit de alimentare conexiune cu surub
Cuplu de strangere	Circuit de comanda 1,2 N.m Circuit de alimentare 18 N.m
Suport de montare	Placa
Disipare de caldura	8...9,8 W
Motor power range	30...50 KW la 200...240 V 3 faze 55...100 KW la 200...240 V 3 faze 55...100 KW la 380...440 V 3 faze 55...100 KW la 480...500 V 3 faze 110...220 kW la 480...500 V 3 faze
Tip demaror motor	Direct on-line contactor
Tensiune contactor bobina	230 V c.a. standard
Standarde	EN 60947-1 IEC 60947-4-1 IEC 60947-1 SR EN 60947-4-1 JIS C8201-4-1
Certificari produs	CSA[RETURN]CB[RETURN]LROS (Lloyds register of shipping) [RETURN]DNV[RETURN]UL[RETURN]BV[RETURN]ABS[RETURN]RMRoS[RETURN]RINA[RET
Cod compatibilitate	LC1F
Tipul circuitului de comanda	C.a. la 40...400 Hz

Mediu

Grad de protectie IP	IP2x parte frontala fara capace de protectie conformitate cu SR EN 60529 IP2x parte frontala fara capace de protectie conformitate cu VDE 0106
Tratament protector	TH
Temperatura ambientala de functionare	-5...55 °C
Temperatura ambietala pentru depozitare	-60...80 °C
Temperatura permisa a aerului in jurul aparatului	-40...70 °C
Inaltime	174 mm
Latime	168,5 mm
Adancime	181 mm
Altitudinea de functionare	3000 m fara declansare
Greutate neta	4,65 kg

Unitati de ambalare

Unitate de masura pentru prima forma de impachetare	PCE
Numar unitati in prima forma de impachetare	1
Inaltime prima forma de impachetare	21,000 cm
Latime prima forma de impachetare	22,000 cm
Lungime prima forma de impachetare	23,500 cm
Greutate prima forma de impachetare	4,928 kg
Unitate de masura pentru a doua forma de impachetare	S04
Numar unitati in a doua forma de impachetare	2
Inaltime a doua forma de impachetare	30,000 cm
Latime a doua forma de impachetare	40,000 cm
Lungime a doua forma de impachetare	60,000 cm
Greutate a doua forma de impachetare	10,463 kg
Unitate de masura pentru a treia forma de impachetare	P06

Numar unitati in a treia forma de impachetare	12
Inaltime a treia forma de impachetare	75,000 cm
Latime a treia forma de impachetare	60,000 cm
Lungime a treia forma de impachetare	80,000 cm
Greutate a treia forma de impachetare	71,778 kg

Sustenabilitatea ofertei

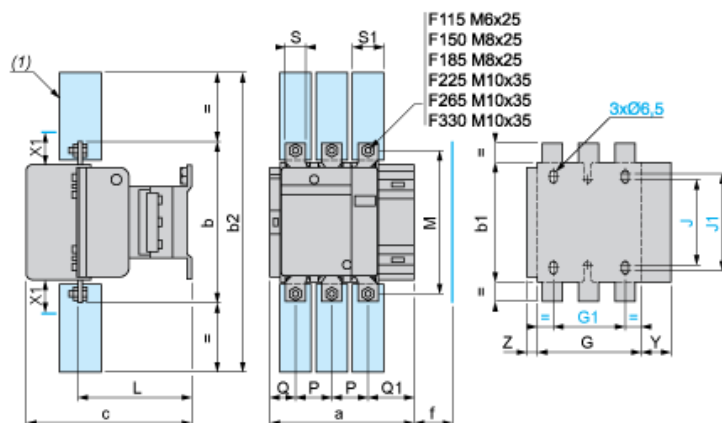
Stare ofertă sustenabilă	Produs Green Premium
Regulamentul REACH	Declaratia REACH
Directiva RoHS UE	Conform cu anumite exceptii
Fara mercur	Da
Regulamentul RoHS China	Declaratia RoHS China
Informatii privind scutirea de la RoHS	Da
Raport de mediu	Profilul Ambiental Al Produsului
Profil circularitate	Informatii Privind Sfarsitul Duratei De Viata
WEEE	În Uniunea Europeana, produsele trebuie reciclate respectand sistemul specific de colectare a deseurilor si nu trebuie sa ajunga in pubelele de colectare a deseurilor menajere.
Fara PVC	Da

Garanție contractuală

Garantie	18 months
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Dimensions and Drawings

LC1 F115 to F330



(1) Power terminal protection shroud

X1 (mm) = Minimum electrical clearance according to operating voltage and breaking capacity.

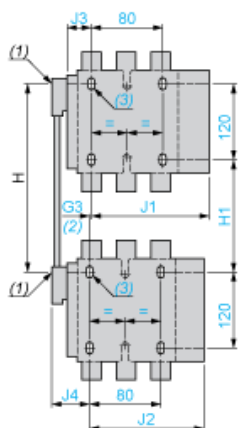
LC1	200...500 V	600...1000 V
F115, F150	10	15
F185	10	15
F225, F265	10	15
F330	10	15

LC1		a	b	b1	b2	c	f	G	G1	J	J1	L	M	P	Q	Q1	S	S1	Y	Z
F115	3P	163.5	162	137	265	171	131	106	80	106	120	107	147	37	29.5	60	20	26	44	13.5
	4P	200.5	162	137	265	171	131	143	80	106	120	107	147	37	29.5	60	20	26	44	13.5
F150	3P	163.5	170	137	301	171	131	106	80	106	120	107	150	40	26	57.5	20	34	44	13.5
	4P	200.5	170	137	301	171	131	143	80	106	120	107	150	40	26	55.5	20	34	44	13.5
F185	3P	168.5	174	137	305	181	130	111	80	106	120	113.5	154	40	29	59.5	20	34	44	13.5
	4P	208.5	174	137	305	181	130	151	80	106	120	113.5	154	40	29	59.5	20	34	44	13.5
F225	3P	168.5	197	137	364	181	130	111	80	106	120	113.5	172	48	21	51.5	25	44.5	44	13.5
	4P	208.5	197	137	364	181	130	151	80	106	120	113.5	172	48	17	47.5	25	44.5	44	13.5
F265	3P	201.5	203	145	375	213	147	142	96	106	120	141	178	48	39	66.5	25	44.5	38	21.5
	4P	244.5	203	145	375	213	147	190	96	106	120	141	178	48	34	66.5	25	44.5	38	16.5
F330	3P	213	206	145	375	219	147	154.5	96	106	120	145	181	48	43	74	25	44.5	38	20.5
	4P	261	206	145	375	219	147	202.5	96	106	120	145	181	48	43	74	25	44.5	38	20.5

TeSys F reversing contactors and changeover contactor pairs, vertically mounted

NOTE: For customer assembly, with mechanical interlock (MI) LA9 F, fixing recommended on AM1 EC uprights (please consult your Regional Sales Office). 2 x LC1 identical or different ratings (LC1 F115 to F630 and F800).

Assembly A



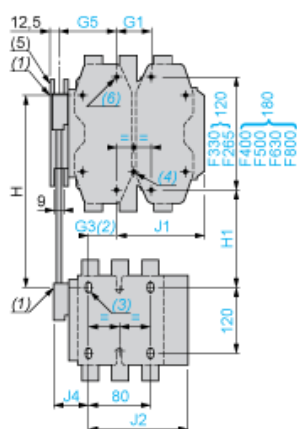
- (1) Mechanical interlock shaft.
 (2) For assembly of contactors of different ratings only.
 (3) 4 x Ø6.5 for LC1 F115 to F225.

Assembly A⁽⁷⁾ - Mechanical interlock reference

	G3 3P	G3 4P	H min.	H max.	H1 min.	H1 max.	J1 3P	J1 4P
LA9 FF4F	0	0	200	310	80	190	137	155.5
LA9 FG4F	3	4	210	300	90	180	139.5	159.5
LA9 FG4G	0	0	220	310	100	190	139.5	159.5

	J2 3P	J2 4P	J3 3P	J3 4P	J4 3P	J4 4P
LA9 FF4F	137	155.5	48.5	67	48.5	67
LA9 FG4F	137	155.5	53	73	54	69
LA9 FG4G	139.5	159.5	53	73	53	73

Assembly B



- (4) 4 x Ø6.5 for LC1 F265.
 (5) Mechanical interlock guide bracket.

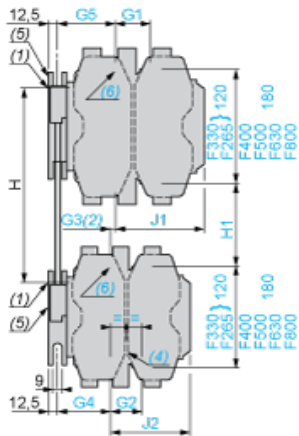
Assembly B⁽⁷⁾ - Mechanical interlock reference

	G1 3P	G1 4P	G3 3P	G3 4P	G5 3P	G5 4P	H min.	H max.
LA9 FH4F	96	96	21	27	60	83	240	380
LA9 FJ4F	80	80	45	26	83	83	250	380
LA9 FK4F	80	140	45	26	83	83	270	380
LA9 FL4F	180	240	35	17	74	74	310	380
LA9 FH4G	96	96	19	23	60	83	250	380
LA9 FJ4G	80	80	42	22	83	83	250	380
LA9 FK4G	80	140	42	22	83	83	270	380
LA9 FL4G	180	240	33	13	74	74	310	380

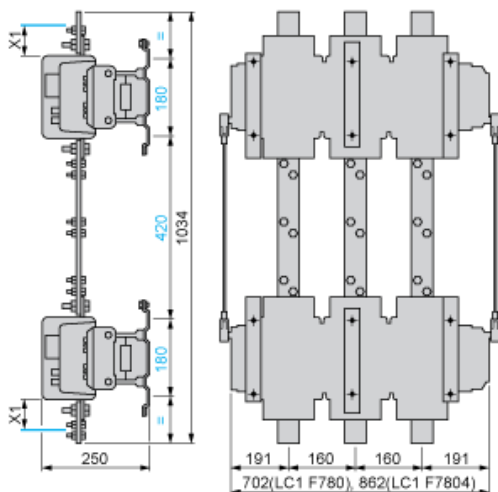
	H1 min.	H1 max.	J1 3P	J1 4P	J2 3P	J2 4P	J4 3P	J4 4P
LA9 FH4F	110	250	157.5	181.5	137	155.5	48.5	67
LA9 FJ4F	80	210	144.5	192.5	137	155.5	48.5	67

	H1 min.	H1 max.	J1 3P	J1 4P	J2 3P	J2 4P	J4 3P	J4 4P
LA9 FK4F	100	210	164.5	219.5	137	155.5	48.5	67
LA9 FL4F	140	210	248.5	328.5	137	155.5	48.5	67
LA9 FH4G	120	250	157.5	181.5	139.5	159.5	53	73
LA9 FJ4G	90	220	144.5	192.5	139.5	159.5	53	73
LA9 FK4G	110	220	164.5	219.5	139.5	159.5	53	73
LA9 FL4G	150	220	248.5	328.5	139.5	159.5	53	73

Assembly C



(6) 4 x Ø8.5 for LC1 F400, F500 or 4 x Ø10.5 for LC1 F630 and F800.



(7) Only 3P for F800.

(8) In this case, G4 is greater than G5.

Assembly C⁽⁷⁾

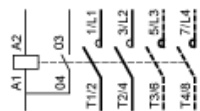
	G1 3P	G1 4P	G2 3P	G2 4P	G3 3P	G3 4P	G4 3P	G4 4P	G5 3P	G5 4P
LA9 FH4H	96	96	96	96	0	0	60	83	60	83
LA9 FJ4H	80	80	96	96	23	0	60	83	83	83
LA9 FK4H	80	140	96	96	23	0	60	83	83	83
LA9 FL4H	180	240	96	96	14	g ⁽⁸⁾	60	83	74	74
LA9 FJ4J	80	80	80	80	0	0	83	83	83	83
LA9 FK4J	80	140	80	80	0	0	83	83	83	83
LA9 FL4J	180	240	80	80	g ⁽⁸⁾	g ⁽⁸⁾	83	83	74	74
LA9 FK4K	80	140	80	140	0	0	83	83	83	83
LA9 FL4K	180	240	80	140	g ⁽⁸⁾	g ⁽⁸⁾	83	83	74	74
LA9 FL4L	180	240	180	240	0	0	74	74	74	74

	H min.	H max.	H1 min.	H1 max.	J1 3P	J1 4P	J2 3P	J2 4P
LA9 FH4H	250	380	130	260	157.5	181.5	157.5	181.5

	H min.	H max.	H1 min.	H1 max.	J1 3P	J1 4P	J2 3P	J2 4P
LA9 FJ4H	260	380	110	230	144.5	192.5	157.5	181.5
LA9 FK4H	280	380	130	230	164.5	219.5	157.5	181.5
LA9 FL4H	330	380	170	220	248.5	328.5	157.5	181.5
LA9 FJ4J	260	380	60	200	144.5	192.5	144.5	192.5
LA9 FK4J	280	380	100	200	164.5	219.5	144.5	192.5
LA9 FL4J	325	380	140	195	248.5	329.5	144.5	192.5
LA9 FK4K	300	380	120	200	164.5	329.5	164.5	219.5
LA9 FL4K	345	380	160	195	248.5	328.5	164.5	219.5
LA9 FL4L	380	380	200	200	248.5	328.5	248.5	328.5

Connections and Schema

2, 3, and 4-pole Contactors



LC1 F115 to F630, F1250 (coil LX1 F ~)



LC1 F115 to F630 , F1250 (coil LX4 F ---)

LC1 F115 to F265 (coil LX9 F ~)

LC1 F800 (coil LX8 F ~ / ---)

