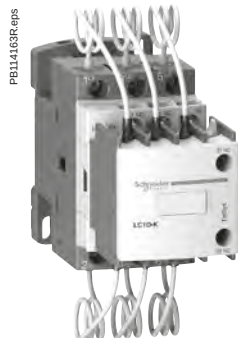


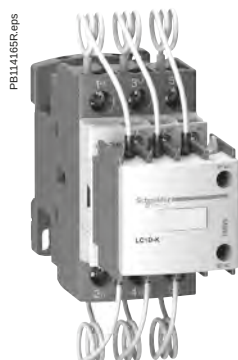
TeSys contactors

For switching 3-phase capacitor banks, used for power factor correction

Direct connection without choke inductors



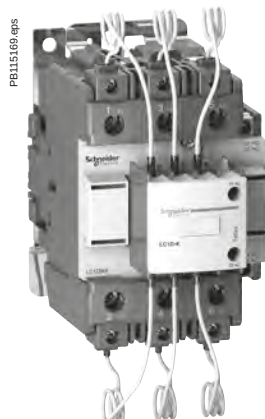
LC1 DFK●●



LC1 DGK●●, LC1 DLK●●, LC1 DMK●●



LC1 DPK●●, LC1 DTK●●



LC1 DWK12●●

Dimensions, schemes:
page B8/87

Special contactors

Special contactors **LC1 D●K** are designed for switching 3-phase, single or multiple-step capacitor banks (up to 6 steps). Over 6 steps, it is recommended to use chokes in order to limit the inrush current and thus improve the lifetime of the installation. The contactors conform to standards IEC 60070 and 60831, UL and CSA.

Contactor applications

Specification

Contactors fitted with a block of early make poles and damping resistors, limiting the value of the current on closing to 60 In max.

This current limitation increases the life of all the components of the installation, in particular that of the fuses and capacitors.

Operating conditions

Short-circuit protection must be provided by gI type fuses rated at 1.7...2 In.

It will ensure the service continuity of the whole installation in case of a capacitor contactor end of life

Maximum operational power

The power values given in the selection table below are for the following operating conditions:

Prospective peak current at switch-on	LC1 D●K	200 In
Maximum operating rate	LC1 DFK, DGK, DLK, DMK	240 operating cycles/hour
	LC1 DPK, DTK, DWK	100 operating cycles/hour
Electrical durability at nominal load	All contactor ratings	400 V 300 000 operating cycles
		690 V 200 000 operating cycles

Operational power at 50/60 Hz ⁽¹⁾ $\theta \leq 60^\circ\text{C}$ ⁽²⁾				Instantaneous auxiliary contacts		Tightening torque on cable end	Basic reference, to be completed by adding the voltage code ⁽³⁾	Weight
230 V	400 V	440 V	690 V	N/O	N/C	N.m		kg
kVAR	kVAR	kVAR	kVAR					
7	12.5	12.5	21	1	2	1.7	LC1DFK●●	0.430
9.5	16.7	16.7	28.5	1	2	2.5	LC1DGK●●	0.450
11	20	21	33	1	2	2.5	LC1DLK●●	0.600
14	25	27	42	1	2	2.5	LC1DMK●●	0.630
17	30	32	50	1	2	5	LC1DPK●●	1.300
22	40	43	67	1	2	5	LC1DTK●●	1.300
35	63	67	104	1	2	9	LC1DWK12●●	1.650

Switching of multiple-step capacitor banks (with equal or different power ratings)

The correct contactor for each step is selected from the above table, according to the power rating of the step to be switched.

Example: 50 kVAR 3-step capacitor bank. Temperature: 50 °C and U = 400 V or 440 V.

One 25 kVAR step: contactor LC1 DMK, one 15 kVAR step: contactor LC1 DGK, and one 10 kVAR step: contactor LC1 DFK.

⁽¹⁾ Operational power of the contactor according to the scheme on the page opposite.

⁽²⁾ The average temperature over a 24-hour period, in accordance with standards IEC 60070 and 60831 is 45 °C.

⁽³⁾ Standard control circuit voltages (the delivery time is variable, please consult your Regional Sales Office):

Volts	24	48	110	120	220	230	240	380	400	415	440
50/60 Hz	B7	E7	F7	G7	M7	P7	U7	Q7	V7	N7	R7



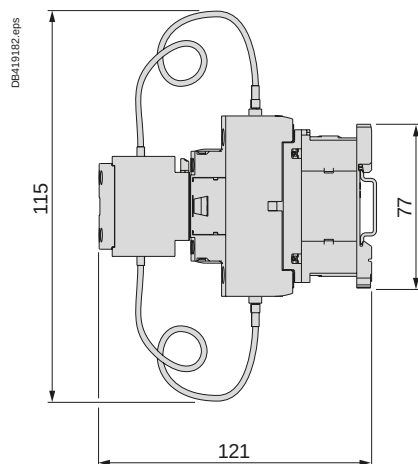
Click [HERE](#) for access to online contactor selector

TeSys contactors

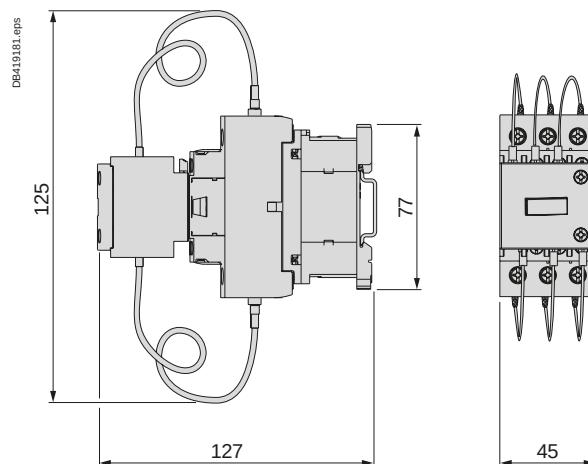
For switching 3-phase capacitor banks, used for power factor correction

Dimensions

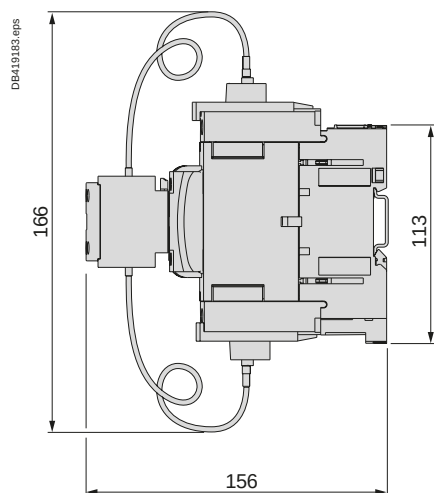
LC1 DFK



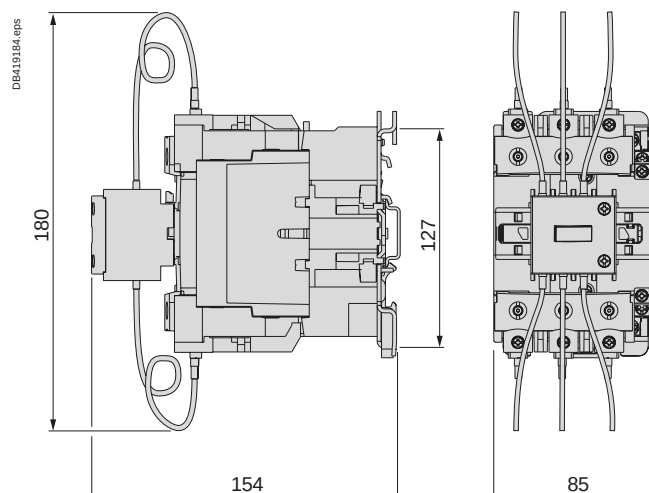
LC1 DGK, DLK, DMK



LC1 DPK, DTK

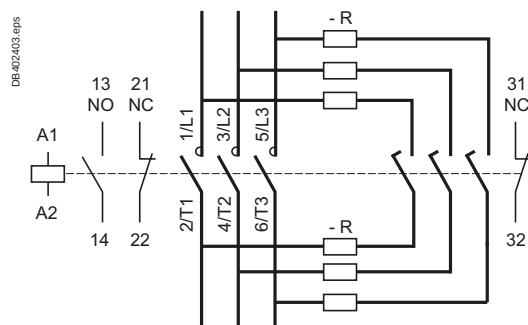


LC1 DWK



Schemes

LC1 D●K



R = Pre-wired resistor connections.