

See page opposite for mounting possibilities according to the contactor type






TeSys contactors

TeSys D contactors and reversing contactors
Instantaneous auxiliary contact blocks

Instantaneous auxiliary contact blocks for connection by screw clamp terminals

For use in normal operating environments

In order to mount an LAD 8N on an LC1 D80 to D95, a set of shims must be ordered separately, see page 5/85

| Clip-on mounting (1) | Number of contacts per block | Composition | | | | | Reference | Weight kg |
|-------------------------|-----------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-----------|--------------|
| | |  |  |  |  |  | | |
| Front | 1 | - | - | - | 1 | - | LAD N10 | 0.020 |
| | | - | - | - | - | 1 | LAD N01 | 0.020 |
| | 2 | - | - | - | 1 | 1 | LAD N11 | 0.030 |
| | | - | - | - | 2 | - | LAD N20 | 0.030 |
| | 4 | - | - | - | - | 2 | LAD N02 | 0.030 |
| | | - | - | - | 2 | 2 | LAD N22 | 0.050 |
| | | - | - | - | 1 | 3 | LAD N13 | 0.050 |
| | | - | - | - | 4 | - | LAD N40 | 0.050 |
| | 4 incl. 1 N/O & 1 N/C make before break | - | - | - | - | 4 | LAD N04 | 0.050 |
| | | - | - | - | 3 | 1 | LAD N31 | 0.050 |
| - | | - | - | 2 | 2 | LAD C22 | 0.050 | |
| - | | - | - | 1 | 1 | LAD 8N11 | 0.030 | |
| Side | 2 | - | - | - | 2 | - | LAD 8N20 | 0.030 |
| | | - | - | - | - | 2 | LAD 8N02 | 0.030 |
| | | - | - | - | - | 2 | LAD 8N02 | 0.030 |

For terminal referencing conforming to EN 50012

| | | | | | | | | |
|-----------------------------------------------------|---|---|---|---|---|---|----------|-------|
| Front on 3P contactors and 4P contactors 20 to 80 A | 2 | - | - | - | 1 | 1 | LAD N11G | 0.030 |
| Front on 4P contactors 125 to 200 A | 4 | - | - | - | 2 | 2 | LAD N22G | 0.050 |
| Front on 4P contactors 125 to 200 A | 2 | - | - | - | 1 | 1 | LAD N11P | 0.030 |
| Front on 4P contactors 125 to 200 A | 4 | - | - | - | 2 | 2 | LAD N22P | 0.050 |

With dust and damp protected contacts, for use in particularly harsh industrial environments

| | | | | | | | | |
|-------|---|---|---|---|---|---|--------------|-------|
| Front | 2 | - | 2 | - | - | - | LA1 DX20 | 0.040 |
| | | 1 | 1 | - | - | - | LA1 DX11 | 0.040 |
| | | 2 | - | - | - | - | LA1 DX02 | 0.040 |
| | 4 | - | 2 | 2 | - | - | LA1 DY20 (2) | 0.040 |
| | | - | 2 | - | 2 | - | LA1 DZ40 | 0.050 |
| | | - | 2 | - | 1 | 1 | LA1 DZ31 | 0.060 |

Instantaneous auxiliary contact blocks for connection by lugs

This type of connection is not possible for blocks with 1 contact or blocks with dust and damp protected contacts. For all other instantaneous auxiliary contact blocks, add the figure 6 to the end of the references selected above. Example: LAD N11 becomes LAD N116.

Instantaneous auxiliary contact blocks for connection by spring terminals

This type of connection is not possible for LAD 8, LAD N with 1 contact or blocks with dust and damp protected contacts. For all other contact blocks, add the figure 3 to the end of the references selected above. Example: LAD N11 becomes LAD N113.

Instantaneous auxiliary contact blocks for connection by Faston connectors

This type of connection is not possible for LAD 8, LAD N with 1 contact or blocks with dust and damp protected contacts. For all other contact blocks, add the figure 9 to the end of the references selected above. Example: LAD N11 becomes LAD N119.

(1) Maximum number of auxiliary contacts that can be fitted:

| Type | Number of poles and size | Contactors | Instantaneous auxiliary contacts | | | | Time delay Front mounted | |
|--------|----------------------------|-------------------------------|----------------------------------|---------------|------------|------------|--------------------------------|------|
| | | | Side mounted | Front mounted | | | | |
| | | | | 1 contact | 2 contacts | 4 contacts | | |
| ~ | 3P | LC1 D09...D38 | 1 on LH side | and | - | 1 | or 1 | or 1 |
| | | LC1 D40A...D65A | 1 on LH or 1 on RH side | and | - | 1 | or 1 | or 1 |
| | | LC1 D80 and D95 (50/60 Hz) | 1 on each side | or | 2 | and 1 | or 1 | or 1 |
| | 4P | LC1 D80 and D95 (50 or 60 Hz) | 1 on each side | and | 2 | and 1 | or 1 | or 1 |
| | | LC1 D115 and D150 | 1 on LH side | and | - | 1 | or 1 | or 1 |
| | | LC1 DT20...DT40 | 1 on LH side | and | - | 1 | or 1 | or 1 |
| --- | 3P | LC1 DT60A and DT80A | 1 on LH or 1 on RH side | and | - | 1 | or 1 | or 1 |
| | | LC1 D40008, D65008 and D80 | 1 on each side | or | 1 | or 1 | or 1 | or 1 |
| | | LC1 D115 | 1 on each side | and | 1 | or 1 | or 1 | or 1 |
| | 4P | LC1 D09...D38 | - | - | - | 1 | or 1 | or 1 |
| | | LC1 D40A...D65A | - | - | - | 1 | or 1 | or 1 |
| | | LC1 D80 and D95 | - | - | - | 1 | or 1 | or 1 |
| BC (3) | 3P | LC1 D115 and D150 | 1 on LH side | and | - | 1 | or 1 | or 1 |
| | | LC1 DT20...DT40 | - | - | - | 1 | or 1 | or 1 |
| | | LC1 DT60A and DT80A | - | - | - | 1 | or 1 | or 1 |
| 4P | LC1 D40008, D65008 and D80 | - | - | - | 2 | and 1 | or 1 | or 1 |
| | LC1 D115 | 1 on each side | - | - | and 1 | or 1 | or 1 | |
| | LC1 D09...D38 | - | - | - | 1 | - | - | |
| 4P | LC1 DT20...DT40 | - | - | - | 1 | - | - | |

(2) Device fitted with 4 earth screen continuity terminals.

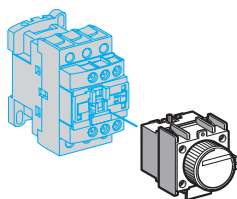
(3) LC: low consumption.

TeSys contactors

TeSys D contactors and reversing contactors

Time delay auxiliary contact blocks

Mechanical latch blocks



LAD T●

Time delay auxiliary contact blocks for connection by screw clamp terminals

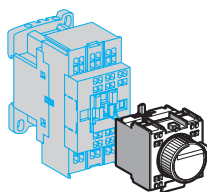
Maximum number of auxiliary contact blocks that can be fitted per contactor, see page 5/79.

Sealing cover to be ordered separately, see page 5/85.

LAD T0 and LAD R0: with extended scale from 0.1 to 0.6 s.

LAD S2: with switching time of 40 ms ± 15 ms between opening of the N/C contact and closing of the N/O contact.

| Clip-on mounting | Number of contacts | Time delay | | Reference | Weight kg |
|------------------|--------------------|------------|---------------|-----------|-----------|
| | | Type | Setting range | | |
| Front | 1 N/O + 1 N/C | On-delay | 0.1...3 s | LAD T0 | 0.060 |
| | | | 0.1...30 s | LAD T2 | 0.060 |
| | | | 10...180 s | LAD T4 | 0.060 |
| | | | 1...30 s | LAD S2 | 0.060 |
| | | Off-delay | 0.1...3 s | LAD R0 | 0.060 |
| | | | 0.1...30 s | LAD R2 | 0.060 |
| | | | 10...180 s | LAD R4 | 0.060 |



LAD T●3

Time delay auxiliary contact blocks for connection by lugs

Add the figure 6 to the end of the references selected above. Example: LAD T0 becomes LAD T06.

Time delay auxiliary contact blocks for connection by spring terminals

Add the figure 3 to the end of the references selected above. Example: LAD T0 becomes LAD T03

Time delay auxiliary contact blocks for connection by Faston connectors

Add the figure 9 to the end of the references selected above. Example: LAD T0 becomes LAD T09.

Mechanical latch blocks (1)

| Clip-on mounting | Unlatching control | For use on contactor | Basic reference, to be completed by adding the control voltage code (2) | Weight kg |
|------------------|--------------------|----------------------------------------------------------------------|-------------------------------------------------------------------------|-----------|
| Front | Manual or electric | LC1 D09...D38 (~ or ---) | LAD 6K10● | 0.070 |
| | | LC1 DT20...DT40 (~ or ---) | | |
| | | LC1 D40A...D65A (3 P ~ or ---) LC1 DT60A and DT80A (4 P ~ or ---) | LAD 6K10● | 0.070 |
| Front | Manual or electric | LC1 D80...D150 (3 P ~) | LA6 DK20● | 0.090 |
| | | LC1 D80 and D115 (3 P ---) | | |
| | | LC1 D80 (4 P ~) | | |
| | | LC1 D80 and D115 (4 P ~) | | |
| | | LP1 D80 and LC1 D115 (4 P ---) | | |

(1) The mechanical latch block must not be powered up at the same time as the contactor.

The duration of the control signal for the mechanical latch block and the contactor should be:

≥ 100 ms for a contactor operating on an a.c. supply,

≥ 250 ms for a contactor operating on a d.c. supply.

Maximum impulse duration for the LAD 6K10● mechanical latch block: 10 seconds.

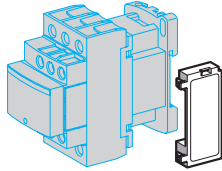
(2) Standard control circuit voltages (for other voltages, please consult your Regional Sales Office).

| Volts 50/60 Hz, --- | 24 | 32/36 | 42/48 | 60/72 | 100 | 110/127 | 220/240 | 256/277 | 380/415 |
|---------------------|----|-------|-------|-------|-----|---------|---------|---------|---------|
| Code | B | C | E | EN | K | F | M | U | Q |

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Suppressor modules

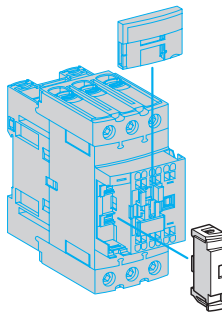


LAD 4●●

RC circuits (Resistor-Capacitor)

Effective protection for circuits highly sensitive to "high frequency" interference. For use only in cases where the voltage is virtually sinusoidal, i.e. less than 5% total harmonic distortion. Voltage limited to 3 Uc max. and oscillating frequency limited to 400 Hz max. Slight increase in drop-out time (1.2 to 2 times the normal time).

| Mounting | For use with contactor (1) Rating | Type | | Reference | Weight kg |
|----------------------------|----------------------------------------|-----------|-------|-----------|--------------|
| | | V ~ | V --- | | |
| Clip-on side mounting (3) | D09...D38 (3P) DT20...DT40 | 24...48 | – | LAD 4RCE | 0.012 |
| | | 50...127 | – | LAD 4RCG | 0.012 |
| | | 110...250 | – | LAD 4RCU | 0.012 |
| Clip-on front mounting (3) | D40A...D65A (3P) DT60A...DT80A (4P) | 24...48 | – | LAD 4RC3E | 0.020 |
| | | 50...127 | – | LAD 4RC3G | 0.020 |
| | | 110...240 | – | LAD 4RC3U | 0.020 |
| | | 380...415 | – | LAD 4RC3N | 0.040 |
| Screw fixing (4) | D80...D150 (3P) D40...D115 (4P) | 24...48 | – | LA4 DA2E | 0.018 |
| | | 50...127 | – | LA4 DA2G | 0.018 |
| | | 110...240 | – | LA4 DA2U | 0.018 |
| | | 380...415 | – | LA4 DA2N | 0.018 |

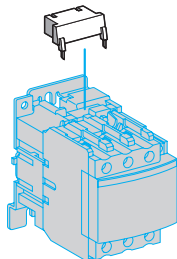


LAD 4RC3●, LAD 4V3●,
LAD 4D3U, LAD 4T3●

Varistors (peak limiting)

Protection provided by limiting the transient voltage to 2 Uc max. Maximum reduction of transient voltage peaks. Slight increase in drop-out time (1.1 to 1.5 times the normal time).

| | | | | | |
|----------------------------|----------------------------------------|-----------|-----------|----------|-------|
| Clip-on side mounting (3) | D09...D38 (3P) DT20...DT40 | 24...48 | – | LAD 4VE | 0.012 |
| | | 50...127 | – | LAD 4VG | 0.012 |
| | | 110...250 | – | LAD 4VU | 0.012 |
| Clip-on front mounting (3) | D40A...D65A (3P) DT60A...DT80A (4P) | 24...48 | 24...48 | LAD 4V3E | 0.020 |
| | | 50...127 | 50...127 | LAD 4V3G | 0.020 |
| | | 110...250 | 110...250 | LAD 4V3U | 0.020 |
| | | – | – | – | – |
| Screw fixing (4) | D80...D115 (3P) D80...D115 (4P) | 24...48 | – | LA4 DE2E | 0.018 |
| | | 50...127 | – | LA4 DE2G | 0.018 |
| | | 110...250 | – | LA4 DE2U | 0.018 |
| | D80...D95 (3P) D80 (4P) | – | 24...48 | LA4 DE3E | 0.018 |
| | | – | 50...127 | LA4 DE3G | 0.018 |
| | | – | 110...250 | LA4 DE3U | 0.018 |



LA4 D●●

Flywheel diodes

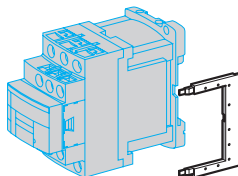
No overvoltage or oscillating frequency. Increase in drop-out time (6 to 10 times the normal time). Polarised component.

| | | | | | |
|----------------------------|--------------------------------------|---|----------|----------|-------|
| Clip-on side mounting (5) | D09...D38 (3P), DT20...DT40 | – | 24...250 | LAD 4DDL | 0.012 |
| Clip-on front mounting (5) | D40A...D65A (3P), DT60A...DT80A (4P) | – | 24...250 | LAD 4D3U | 0.020 |
| Screw fixing (4) | D80 and D95 (3P), D40...D80 (4P) | – | 24...250 | LA4 DC3U | 0.018 |

Bidirectional peak limiting diodes

Protection provided by limiting the transient voltage to 2 Uc max. Maximum reduction of transient voltage peaks.

| | | | | | |
|-------------------------------|--------------------------------------------|-----------|-----------|-----------|-------|
| Clip-on side mounting (3) (5) | D09...D38 (3P) DT20...DT40 (4P) (2) | 24 | – | LAD 4TB | 0.012 |
| | | – | 24 | LAD 4TBDL | 0.012 |
| | | 72 | – | LAD 4TS | 0.012 |
| | | – | 72 | LAD 4TSDL | 0.012 |
| | | – | 125 | LAD 4TGDL | 0.012 |
| | | – | 250 | LAD 4TUDL | 0.012 |
| Clip-on front mounting (3) | D40A...D65A (3P) DT60A...DT80A (4P) (2) | – | 600 | LAD 4TXDL | 0.012 |
| | | 12...24 | 12...24 | LAD 4T3B | 0.020 |
| | | 25...72 | 25...72 | LAD 4T3S | 0.020 |
| | | 73...125 | 73...125 | LAD 4T3G | 0.020 |
| | | 126...250 | 126...250 | LAD 4T3U | 0.020 |
| | | 251...440 | 251...440 | LAD 4T3R | 0.020 |
| Screw fixing (4) | D80...D95 (3P) D40...D80 (4P) | 12...24 | 12...24 | LA4 DB2B | 0.018 |
| | | 25...72 | 25...72 | LA4 DB2S | 0.018 |
| | | – | 24 | LA4 DB3B | 0.018 |
| | | – | 72 | LA4 DB3S | 0.018 |



LAD 4DDL or LAD 4TDL

- (1) For satisfactory protection, a suppressor module must be fitted across the coil of each contactor.
- (2) From D09 to D65A and from LC1 DT20 to DT80A, d.c. and low consumption 3-pole contactors are fitted with a built-in bidirectional peak limiting diode suppressor as standard. This bidirectional peak limiting diode is removable and can therefore be replaced by the user. (See reference above). If a d.c. or low consumption contactor is used without suppression, the standard suppressor should be replaced with a blanking plug (reference LAD 9DL for LC1 D09 to D38 and LC1 DT20 to DT40; reference LAD 9DL3 for LC1 D40A to D65A and LC1 DT60A to DT80A).
- (3) Clipping-on makes the electrical connection. The overall size of the contactor remains unchanged.
- (4) Mounting at the top of the contactor on coil terminals A1 and A2.
- (5) In order to install these accessories, the existing suppression device must first be removed.