

Life Is On Schneider



Green Premium™

Endorsing eco-friendly products in the industry



Green Premium is the only label that allows you to effectively develop and promote an environmental policy whilst preserving your business efficiency. This ecolabel guarantees compliance with up-to-date environmental regulations, but it does more than this.

Over 75% of Schneider Electric manufactured products have been awarded the Green Premium ecolabel

Discover what we mean by green

Check your products!

Schneider Electric's Green Premium ecolabel is committed to offering transparency, by disclosing extensive and reliable information related to the environmental impact of its products:

RoHS

Schneider Electric products are subject to RoHS requirements at a worldwide level, even for the many products that are not required to comply with the terms of the regulation. Compliance certificates are available for products that fulfil the criteria of this European initiative, which aims to eliminate hazardous substances.

REACh

Schneider Electric applies the strict REACh regulation on its products at a worldwide level, and discloses extensive information concerning the presence of SVHC (Substances of Very High Concern) in all of these products.

PEP: Product Environmental Profile

Schneider Electric publishes complete set of environmental data, including carbon footprint and energy consumption data for each of the lifecycle phases on all of its products, in compliance with the ISO 14025 PEP ecopassport program. PEP is especially useful for monitoring, controlling, saving energy, and/or reducing carbon emissions.

EoLI: End of Life Instructions

Available at the click of a button, these instructions provide:

- Recyclability rates for Schneider Electric products.
- Guidance to mitigate personnel hazards during the dismantling of products and before recycling operations.
- Parts identification for recycling or for selective treatment, to mitigate environmental hazards/ incompatibility with standard recycling processes.

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New TeSys D Green contactors series with AC/DC coils



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4 | Discover TeSys D schneider-electric.com/tesys D

TeSys D Green contactors

TeSys D range now enriched with new contactors, featuring AC/DC coils (every coil can be energized with either AC or DC), lower consumption and even more.

Check for 5 major advantages

Low control current > Lower permanent consumption

Reduced coil power (just 0.5 W / 24 V DC for the BBE coil) contributing to increase machine energy efficiency.

Low control current > Direct PLC control for contactors up to 80 A (1)

TeSys D Green contactors (with BBE coil code) can be driven by a common 24 V DC / 500 mA static output, a relay interface is no longer needed.

Coil current permanent monitoring / control > Constant closing / opening time regardless of voltage fluctuation, for reliable repetitive actions.

Coil current permanent monitoring / control > Reduced contacts bounces due to machine shocks and vibrations, preventing from microbreaks.

Keeps legacy standard dimensions and terminal assignment > one 'TeSys D Green' can replace many 'TeSys D' contactors as a spare, when maintenance is needed, with better performances.

(1) 80 A rating available end 2017.



Only 4 contactors in each rating, for covering control voltages from 24 to 500 V DC or AC.

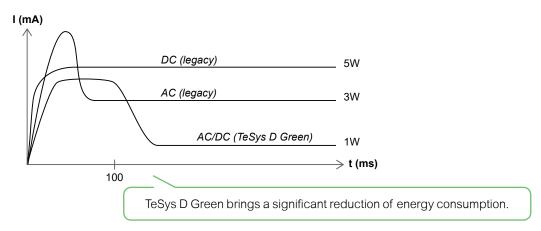
> Significant stock reduction.

schneider-electric.com/tesys D Discover TeSys D | 5

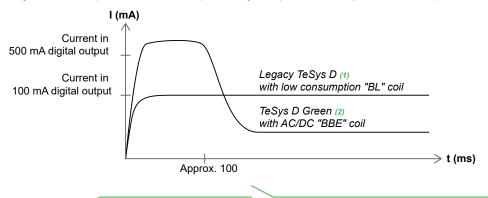
TeSys D Green contactors

Coil currents comparison

TeSys D Green (AC/DC coil) vs Tesys D legacy (AC, DC coils)



TeSys D Green (AC/DC "BBE" coil) vs TeSys D (low consumption "BL" coil)

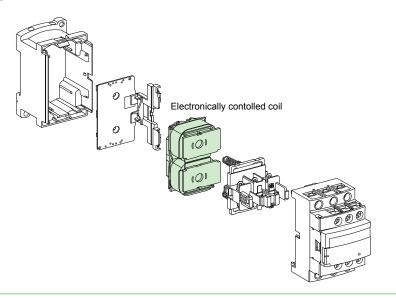


(1) Up to 38 A. (2) 45 to 80 A.

TeSys D Green is well adapted to direct control by PLC static outputs, even in its high ratings.

TeSys D Green - exploded view

TeSys D Green contactors keep the same high resistance to shock and vibration as TeSys D, their coils offer a wider control voltage band and a lower permanent consumption.



TeSys D Green contactors

For motor control up to 37 kW / 400 V Category AC-3





LC1 D40A•••

Standard power ratings of 3-phase motors 50-60 Hz in category AC-3 $(\theta \leqslant 60~^{\circ}\text{C})$			opera- taneous t tional auxiliary t current contacts		ous	Basic reference, to be completed by addin the control voltage code	Weight g			
220 V 230 V	380 V 400 V	415 V	440 V	500 V	660 V 690 V	— 440 V up to	\	7	·	
kW	kW	kW	kW	kW	kW	Α				kg
Conn	ection	by scre	ew clan	np term	inals					
2.2	4	4	4	5.5	5.5	9	1	1	LC1D09•••	0.36
3	5.5	5.5	5.5	7.5	7.5	12	1	1	LC1D12•••	0.37
4	7.5	9	9	10	10	18	1	1	LC1D18•••	0.37
5.5	11	11	11	15	15	25	1	1	LC1D25•••	0.43
7.5	15	15	15	18.5	18.5	32	1	1	LC1D32•••	0.43
9	18.5	18.5	18.5	18.5	18.5	38	1	1	LC1D38•••	0.44
Powe	r conn	ections	by Ev	erLink®	BTR (2)	screw co	nnec	ctors a	and control by screw cla	mp terminal
11	18.5	22	22	22	30	40	1	1	LC1D40A●●●	0.99
15	22	25	30	30	33	50	1	1	LC1D50Aeee	0.99
18.5	30	37	37	37	37	65	1	1	LC1D65A•••	1.00
22	37	37	37	45	45	80	1	1	LC1D80A●●● (3)	1.00
Auxi	iliary	conta	ct blo	cks a	nd ad	d-on mo	odul	les		
See pa	ages 10) to 14.								
			code	s						
	C supp									
Volts	- oupp	_	24 (DC or	nly)	24-60		48	8-130	100-250	250 V - 415 V AC / 250 V - 500 V DC

BNE

EHE

KUE

USE (3)

LC1D09 ...D38, LC1D40A ... D80A U 0.85...1.1 Uc

LC1D40A ... D80A U 0.8...1.2 Uc

⁽¹⁾ LC1 D09 to D80A: clip-on mounting on 35 mm _r rail AM1 DP or screw fixing.

⁽²⁾ BTR screws: hexagon socket head. In accordance with local electrical wiring regulations, a size 4 insulated Allen key must be used (reference LAD ALLEN4, see page 14).

⁽³⁾ Available end of 2017.

TeSys D Green reversing contactors For motor control up to 37 kW / 400 V Category AC-3



LC2 D09●●●

kW	kW	kW	kW	kW	kW	Α			ka
	°C)				660 V 690 V	opera- tional current in AC-3 440 V up to	taneous auxiliary contacts per contactor	Partial reference, to be completed by adding the control voltage code Fixing (1)	-
					_	Datad	Instan	Contactors cumplied with soil	Weight
Pro-wi	red no	war c	onnac	tions					
3-po	le re	versi	ng co	ontac	tors				
	Pre-wi Standa motor: (θ ≤ 60 220 V 230 V	Pre-wired po Standard pov motors 50-60 (θ ≤ 60 °C) 220 V 380 V 230 V 400 V	Pre-wired power of Standard power rati motors 50-60 Hz in α (θ ≤ 60 °C) 220 V 380 V 415 V 230 V 400 V	Pre-wired power connects Standard power ratings of s motors 50-60 Hz in categor (θ ≤ 60 °C) 220 V 380 V 415 V 440 V 230 V 400 V	Pre-wired power connections Standard power ratings of 3-phase motors 50-60 Hz in category AC-3 (θ ≤ 60 °C) 220 V 380 V 415 V 440 V 500 V 230 V 400 V	Standard power ratings of 3-phase motors 50-60 Hz in category AC-3 $(\theta \leqslant 60~^{\circ}\text{C})$ 220 V 380 V 415 V 440 V 500 V 660 V 230 V 400 V 690 V	Pre-wired power connections Standard power ratings of 3-phase motors 50-60 Hz in category AC-3 (θ ≤ 60 °C) Rated operational current in AC-3 440 V up to 220 V 380 V 415 V 440 V 500 V 660 V 230 V 400 V	Pre-wired power connections Standard power ratings of 3-phase motors 50-60 Hz in category AC-3 (θ ≤ 60 °C) Rated operational current in AC-3 per contacts in AC-3 per contactor up to 220 V 380 V 415 V 440 V 500 V 660 V 690 V	Pre-wired power connections Standard power ratings of 3-phase motors 50-60 Hz in category AC-3 (θ ≤ 60 °C) Rated operational current in AC-3 per 440 V up to 220 V 380 V 415 V 440 V 500 V 690 V Rated operational auxiliary contacts in AC-3 per Fixing (1) Fixing (1)



LC2 D40A•••

kW	kW	kW	kW	kW	kW	Α				kg	
With	mecha	anical	interlo	ck, wi	thout	electr	ical interlo	cking	, for connection by screw clamp terminals		
or Everlink BTR screw connectors (2) (3)											
2.2	4	4	4	5.5	5.5	9	1	1	LC2D09●●●	0.783	
3	5.5	5.5	5.5	7.5	7.5	12	1	1	LC2D12•••	0.793	
4	7.5	9	9	10	10	18	1	1	LC2D18●●●	0.803	
5.5	11	11	11	15	15	25	1	1	LC2D25●●●	0.913	
7.5	15	15	15	18.5	18.5	32	1	1	LC2D32●●●	0.923	
9	18.5	18.5	18.5	18.5	18.5	38	1	1	LC2D38●●●	0.933	
11	18.5	22	22	22	30	40	1	1	LC2D40A••• (2)	2.154	
15	22	25	30	30	33	50	1	1	LC2D50A••• (2)	2.164	
18.5	30	37	37	37	37	65	1	1	LC2D65A••• (2)	2.174	
22	37	37	37	45	45	80	1	1	LC2D80A••• (2) (4)	2.174	

Auxiliary contact blocks and add-on modules

See names 10 to 15

See pages 10 to	າວ.										
Coil voltage codes											
AC/DC supply											
Volts	24 (DC only)	24-60	48-130	100-250	250 V - 415 V AC / 250 V - 500 V DC						
LC2D09D32, LC2D40A D80A											
U 0.851.1 Uc		BNE	EHE	KUE	USE (4)						
LC2 D40AD80A											
U 0.81.2 Uc	BBE										

- (1) LC2 D09 to D80A: clip-on mounting on 35 mm ur rail AM1 DP or screw fixing.
 (2) BTR screws: hexagon socket head. In accordance with local electrical wiring regulations, a size 4 insulated Allen key must be used (reference LAD ALLEN4, see page 14).
- (3) Electrical interlocking is recommended when 2 orders (direct and reverse) could appeared in the same time.
- (4) Available end of 2017.

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TeSys D Green contactors

For load control from 25 to 80 A Category AC-1



LC1 D09 •••



LC1 D40A•••



LC1 DT60A●●●

3-pole conta	ctors						
Non inductive loa maximum current (θ ≤ 60 °C) utilisation categor	ds Number of poles	Insta taned auxili conta	ous iary		Partial reference to be completed the control volta	by adding	Weight
AC-1	17		Ļ		Fixing (1)		
Α							kg
Connection by	screw clamp	termi	nals				
25	3	1	1		LC1D09•••		0.368
				or	LC1D12•••		0.373
32	3	1	1		LC1D18•••		0.378
40	3	1	1		LC1D25•••		0.433
50	3	1	1		LC1D32•••		0.438
				or	LC1D38•••		0.442
Connection by	EverLink®, B	TR sc	rew c	onn	ectors (2)		
60	3	1	1		LC1D40A●●●		0.992
80	3	1	1		LC1D50A●●●		0.997
				or	LC1D65A••• (3)		1.002
4-pole conta	ctors (4)						
Connection by	EverLink®, B	TR (2) s	screw	/ COI	nnectors		
60	4	1	1		LC1DT60A		1.230
80	4	1	1		LC1DT80A••• (4))	1.290
4-pole chang	neover co	ntact	ors	(4)			
Connection by					nnectors		
60	4	1	1		LC2DT60A•••		2.460
80	4	1	1		LC2DT80Aeee (4))	2.580
Control volta	age codes						2.000
AC/DC supply							
Volts	24 (DC only)	24-60		48	-130 100-2		415 V AC 500 V DC
LC1 D09D65A an	d LCeDT60A.	.DT80A					
U 0.85 1.1 Uc		BNE		EH	IE KUE	USE (5)	
LC1D40 to LC1D65	A, LC●DT60A	to LCel	OT80A	1			
U 0.81.2 Uc	BBE						

⁽¹⁾ LC1 D09 to D65A, LC•DT60A and LC•DT80A: clip-on mounting on 35 mm _rail AM1 DP

⁽²⁾ BTR screws: hexagon socket head. In accordance with local electrical wiring regulations, a size 4 insulated Allen key must be used (reference LAD ALLEN4, see page 14).

(3) Selection according to the number of operating cycles, see AC-1 curve, page 36.

(4) Available in 2018.

⁽⁵⁾ Available end of 2017.

TeSys D Green contactors

For North American market, conforming to UL (1) and CSA standards 25 to 80 A



LC1 D09●●●



LC1 D40A•●●

Con	tactors								
Standa	ard power	ratings o	f motors	50/60 Hz		Associated cable	Continuous	Type of contactor required	
Single 1 Ø	-phase	3-phas 3 Ø	е			type 75 °C-Cu	current	Partial reference, to be completed by adding the control voltage code	
115 V	230 V 240 V	200 V 208 V	230 V 240 V	460 V 480 V	575 V 600 V	-		Fixing, connection (2)	
HP	HP	HP	HP	HP	HP		Α		
Conn	ection by	y screw	clamp t	erminal	s				
1/3	1	2	2	5	7.5	AWG 18 - 10	25	LC1D09•••	
0.5	2	3	3	7.5	10	AWG 18 - 10	25	LC1D12•••	
1	3	5	5	10	15	AWG 18 - 8	32	LC1D18•••	
2	3	7.5	7.5	15	20	AWG 14 - 6	40	LC1D25•••	
2	5	10	10	20	25	AWG 14 - 6	50	LC1D32•••	

Pov	wer conn	ections b	y Ever	Link® B	TR (3) scr	ew connectors and	control by s	spring terminals
3	5	10	10	30	30	AWG 16 - 2	60	LC1D40A●●●
3	7.5	15	15	40	40	AWG 16 - 2	70	LC1D50A●●●
5	10	20	20	40	50	AWG 16 - 2	80	LC1D65Aeee

Applications with High-Fault Short-Circuit ratings

For contactors LC1 D40A to LC1 D65A, the High-Fault Short-Circuit ratings are: 100 kA at 600 V with class J fuses and 85 kA (D09-38), 100 kA (D40A-65A) at 480 V and 50 kA at 600 V with circuit breakers.

Control vol	tage codes				
AC/DC supply					
Volts	24 (DC only)	24-60	48-130	100-250	250 V - 415 V AC / 250 V - 500 V DC
LC1D09 D32, L	C1D40A D65A				
U 0.85 1.1 Uc		BNE	EHE	KUE	USE (4)
LC1D40A D65A	1				
U 0.81.2 Uc	BBE				

⁽¹⁾ Certification in progress

⁽²⁾ LC1 D09 to D65: clip-on mounting on 35 mm ∟ rail AM1 DP or screw fixing.

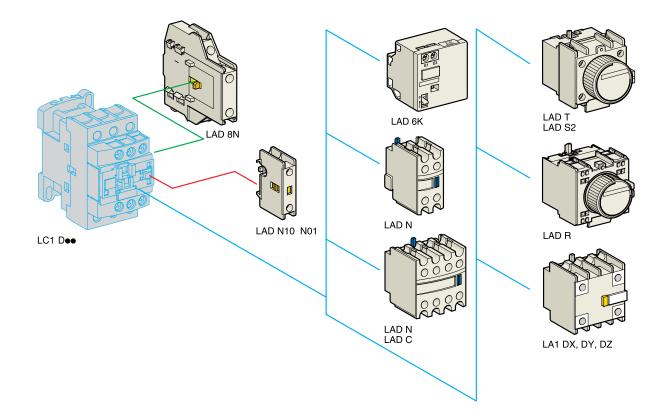
⁽³⁾ BTR screws: hexagon socket head. In accordance with local electrical wiring regulations, a size 4 insulated Allen key must be used (reference LAD ALLEN4, see page 14).

(4) Available end of 2017.

DB423133R.eps

TeSys contactors

TeSys D contactors and reversing contactors Instantaneous auxiliary contact blocks



For use in normal opera	ting environments							
Clip-on mounting	Number of	Co	mpc	sitic	n		Reference	
	contacts per block (1)	¢	14	\$	1	<u>L</u>		
Front	1	_	-	-	1	_	LADN10	
		_	_	_	_	1	LADN01	
	2	_	_	_	1	1	LADN11	
		_	_	_	2	_	LADN20	
		_	_	_	_	2	LADN02	
	4	_	_	_	2	2	LADN22	LADN22S (1)
		_	_	_	1	3	LADN13	
		_	_	_	4	-	LADN40	
		_	_	_	_	4	LADN04	
		_	_	_	3	1	LADN31	
	4 incl. 1 N/O & 1 N/C make before break	-	_	_	2	2	LADC22	
Side	2	_	_	_	1	1	LAD8N11	
		_	_	_	2	_	LAD8N20	
		_	_	_	_	2	LAD8N02	
For terminal referencing	g conforming to EN 50012							
Front on 3P contactors and	2	_	_	_	1	1	LADN11G	
4P contactors 20 to 80 A	4	-	_	_	2	2	LADN22G	
With dust and damp pro	otected contacts, for use in particular	ılarly	y ha	rsh	ind	ustri	al environment	s
Front	2	_	2	_	_	-	LA1DX20	
		1	1	_	_	_	LA1DX11	
		2	_	_	_	_	LA1DX02	

Instantaneous auxiliary contact blocks for connection by screw clamp terminals

Maximu	Maximum number of auxiliary contacts per rating										
Contacto	rs		Instantaneous auxilia	Instantaneous auxiliary contacts							
Coil	Pole	Rating ref.	Side mounted	Side mounted				Front			
					1 contact	2 contact	4 contact	mounted			
AC/DC	3P	LC1 D09D38	1 on Right Hand side	and	-	1	or 1	or 1			
compatible	•	LC1 D40AD80A	1 on RH or LH side	and	_	1	or 1	or 1			
	4P	LC1 DT60A and DT80A	1 on RH or LH side	and	-	1	or 1	or 1			

LA1DY20 (2) LA1DZ40 LA1DZ31

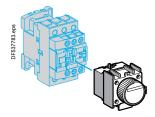


⁽¹⁾ With red front face - for safety chain indication.

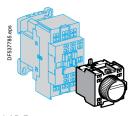
⁽²⁾ Device fitted with 4 earth screen continuity terminals.

TeSys contactors

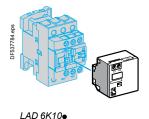
TeSys D contactors and reversing contactors Time delay auxiliary contact blocks, mechanical latch blocks



LAD Te



LAD Re



Time delay auxiliary contact blocks for connection by screw clamp terminals

Maximum number of auxiliary contact blocks that can be fitted per contactor, see

Sealing cover to be ordered separately, see page 14.

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

and closing of the	IVO COMICACI.				
Clip-on mounting	Number	Time dela	ıy	Reference	
	of contacts	Туре	Setting range		
Front	1 N/O + 1 N/C	On-delay	0.13 s	LADT0	
			0.130 s	LADT2	
			10180 s	LADT4	
			130 s	LADS2	
		Off-delay	0.13 s	LADR0	
			0.130 s	LADR2	
			10180 s	LADR4	

Mecha	nical lat	ch k	olocks (1)		
		Foru	ise on contactor		Partial reference to
mounting	CONTROL	Pole	Coil (3)	Reference	be completed with coil voltage code (2)
Front	Manual or	3	AC or DC or AC/DC	LC1D09 D38 LC1D40A D80A	LAD6K10●
	electric	4	AC or DC or AC/DC	LC1DT20 DT40 LC1DT60A DT80A	-

Coil voltag	e co	des							
Volts 50/60 Hz,	24	32/36	42/48	60/72	100	110/127	220/240	256/277	380/415
Code	В	С	E	EN	K	F	M	U	Q

⁽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 with AC coil,

^{≥ 250} ms for a contactor with DC or AC/DC coil.

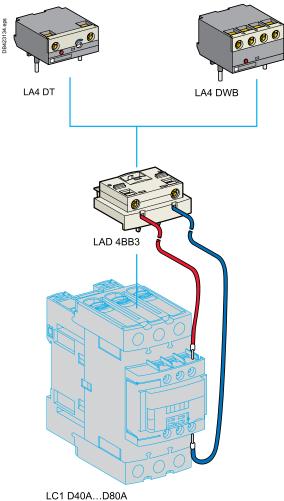
Maximum impulse duration for the LAD 6K10● mechanical latch block: 10 seconds.

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

⁽³⁾ The DC, low consumption contactors (coil code •L) are not compatible with the mechanical latch blocks LAD6K10.

TeSys contactors

TeSys D contactors and reversing contactors Accessories



Electronic serial timer modules (1)

■ To be mounted on 3P contactors LC1D40A to D80A using LAD4BB3 wiring adapter (to be ordered separatly).

On-delay type		
Operational voltage \sim	Time delay	Reference
24250 V		
LC1D40A LC1D80A	0.12 s	LA4DT0U
	1.530 s	LA4DT2U
	25500 s	LA4DT4U

Static relay interface module

■ To be mounted on 3P contactors LC1D40A to D80A using LAD4BB3 wiring adapter (to be ordered separatly).

Relay interface with "AUTO-I" ma solid state type	nual override swi	tch (output forced "ON'),
Operational voltage ~	Supply	Reference	

Operational voltage \sim	Supply	Reference
24250 V	voltage E1-E2 ()	
LC1 D40AD80A	24 V	LA4DWB

Wiring adapter

■ For use with LADT•• timer module, LAD4DWB static relay interface module or for adapting existing top terminals wiring (old contactor) to front terminals (new 3P contactor).

Module with exter	nsion cables	
For use on contactors		Reference
LC1 D40AD80A	Without coil suppression	LAD4BB3

(1) The contactor must be fitted with a BNE, or BBE coil.

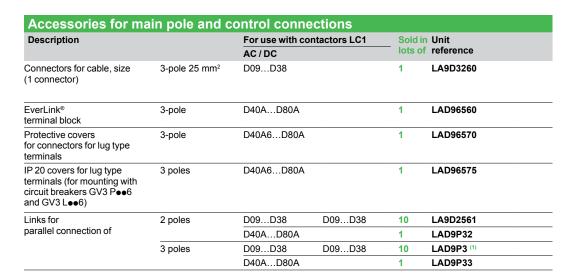
TeSys contactors

TeSys D contactors and reversing contactors

Accessories





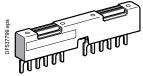




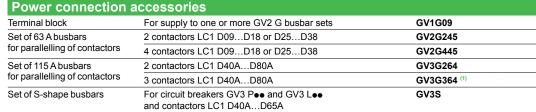
TeSys contactors

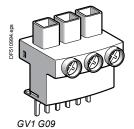
TeSys D contactors and reversing contactors

Accessories

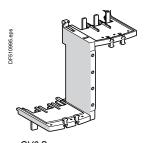


GV2 G245





Protection accesso	ories		
Description	Use	Sold in lots of	Reference
Miniature control circuit fuse holder	5 x 20 with 4 A-250 V fuse	1	LA9D941
Sealing cover	For LAD T, LAD R	1	LA9D901
Safety cover	LC1 D09D80A	1	LAD9ET1
preventing access to the moving contact carrier	Red cover (for safety chain indica	tion) 1	LAD9ET1S



GV3S

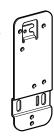
Marking accessorie	es es		
Description	Use	Sold in lots of	Unit reference
Sheet of 64 blank legends, self-adhesive, 8 x 33 mm (2)	Contactors (except 4P) LAD N (4 contacts), LA6 DK	10	LAD21
Sheet of 112 blank legends, self-adhesive, 8 x 12 mm (2)	LAD N (2 contacts), LAD T, LAD R, LRD	10	LAD22
Sheet of 440 blank legends for marking using plotter or 8 x 12 mm engraver	All products	35	LAD24
Marker holder snap-in, 8 x 18 mm	LC1 D09D80A, LC1 DT60DT80A, LAD N (4 contacts), LAD T, LAD R	100	LAD90
Bag of 300 blank legends self-adhesive, 7 x 21 mm	On holder LA9 D92	1	LA9D93
"SIS Label" labelling software supplied on CD-Rom	Multi-language version: English, French, German, Italian, Spanish	1	XBY2U



LA9 D941



LAD 9ET●



LAD 7X3

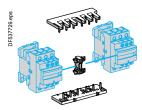
Mounting accesso	ries		
Retrofit plate for screw fixing	For replacement of LC1 D40 to D65 by LC1 D40A to D80A	1	LAD7X3
Size 4 Allen key, insulated, 1000 V	For use on contactors LC1 D40A to LC1 D150	5	LADALLEN4

⁽¹⁾ With this set of busbars, any one contactor can be supplied directly by its EverLink® double cage power terminal block. The other two contactors are supplied by the busbar set. The 115 A limitation is therefore applied to these two contactors. Example: 1 LC1 D65A supplied directly + 1 contactor LC1 D65A and 1 contactor LC1 D50 A supplied via the busbar set = 115 A. This combination is compatible with busbar set GV3 G364.

⁽²⁾ These legends are for sticking onto the safety cover of the contactors or add-on block, if fitted.

TeSys contactors

Component parts for assembling reversing or changeover contactors pairs



LAD 9R1



For 3-pole reversing contactors for motor control

Contactors with screw clamp terminals or connectors. Horizontally mounted, assembled by customer.

Description	For contactors (1) (2 identical contactors)	Reference
Kits for assembly of reversing contactors		
Kit comprising: ■ a mechanical interlock LAD 9V2 with electrical interlocking LAD 9V1 ■ a set of power connections LAD 9V5 (parallel) and LAD 9V6 (reversing).	LC1 D09 to D38	LAD9R1V
Kit comprising: ■ a mechanical interlock LAD 9V2 without electrical interlocking	LC1 D09 to D38	LAD9R1

■ a set of power connections LAD 9V5 (parallel) and LAD 9V6 (reversing).

LC1 D40A to D80A LAD9R3 Kit comprising:

■ a mechanical interlock LAD 4CM

■ a set of power connections LA9 D65A69.		
Mechanical interlocks		
Mechanical interlock without	LC1 D09 to D38	LAD9V2
integral electrical interlocking	LC1 D40A to D80A	LAD4CM
Sets of power connections		
Comprising: ■ a set of parallel bars	LC1 D09 to D38 with screw clamp terminals or connectors	LAD9V5 + LAD9V6
a set of reverser bars.	LC1 D09D32 with spring terminal connections	LAD9V12 + LAD9V13 (2)
	LC1 D40A to D80A	LA9D65A69

Description	For contactors	Reference
Mounting kit comprising:	LC1 D09 and D12	LAD91217
 1 time delay contact block LAD S2 (LC1 D09D80), power circuit connections (LC1 D09D80), hardware required for fixing the contactors onto the 	LC1 D18 to D32	LAD93217
	LC1 D40A and D50A	LAD9SD3
mounting plate (LC1 D80).	LC1 D80A	LA9D8017
Equipment mounting plates	LC1 D09, D12 and D18	LA9D12974
	LC1 D32	LA9D32974
	LC1 D40A and D50A	-
	LC1 D80A	LA9D80973



LA9 D8070

For 3-pole changeover contactor pairs

Contactors with screw clamp terminals or connectors. Horizontally mounted, assembled by customer

Contactors with colon clamp terminals of colling	otoro: monizontally mountou,	accombica by cactomer.
Description	For contactors (1) (2 identical contactors)	Reference
Mechanical interlocks		
Without integral electrical interlocking	LC1 D40AD80A	LAD9R3S

⁽¹⁾ To order the 2 contactors: see page 7.

(2) To assemble a reversing contactor with spring terminal connections, the following components must be ordered:

Upstream power connection kit LAD 9V10: installed in the Quickfit system with power connection module LAD 34. (If module LAD 34 is not used, replace LAD 9V10 with LAD 9V12).

Downstream power connection kit LAD 9V11: installed in the Quickfit system with outgoing terminal block LAD 331. (If LAD 331 is not used, replace LAD 9V11 with LAD 9V13).

^{- 1} mechanical interlock LAD 9V2,

^{- 1} upstream power connection kit and 1 downstream power connection kit.

TeSys contactors TeSys D Green

Coordination with PLC DC and relay output modules

Selection of PLC coordinated contactors

Laboratory tests have been carried out in order to certify trouble free contactor closings and openings with different PLC output modules.

The coil must be defined according to the contactor rating range and output module. See selection table below.

The PLC your are using					Compatible	Coil code	
PLC type	Output type	Output I (A)	Output module commercial reference	>>>	contactors (1)		
M221 / M241 / M251	Static output: 24 V DC	0.5	TM3DQ8••• and Q16••• (T, TG, U, UG)	>>>	LC1D09ee to LC1D38ee, LC1D40Aeee to LC1D80A, LC1DT60Aeee to LC1DT80Aeee	BL, BBE	
		0.3 (sealed) 0.8 (inrush)	TM3XTYS4	>>>	LC1D40A••• to LC1D80A, LC1DT60A••• to LC1DT80A•••	BBE, BL, BD, BNE	
		0.1	TM3DQ16●● and Q32●● (TK, UK)	>>>	LC1D09●● to LC1D38●●	BL	
	Relay output: 24 V DC / 230 V AC	2	TM3DQ8 and DQ16 (R,RG), TM3DM8 and DM24 (R,RG)	>>>	LC1D09ee to LC1D38ee, LC1D40Aeee to LC1D80A, LC1DT60Aeee to LC1DT80Aeee	Code of any DC coil up to 24 V or any AC coil up to 230 V	
M340 /	Static output: 24 V DC	0.5	BMXDDO1602 and DM16022	>>>	LC1D09●● to LC1D38●●	BL	
M580					LC1D40A••• to LC1D80A, LC1DT60A••• to LC1DT80A•••	BBE	
		0.1	BMXDDO3202, BMXDDM3202K, BMXDDO6402K	>>>	LC1D09•• to LC1D38••	BL	
	Relay output: 24 V DC / 230 V AC	2	BMXDRA0805 and DM16025	>>>	LC1D09ee to LC1D38ee, LC1D40Aeee to LC1D80A, LC1DT60Aeee to LC1DT80Aeee	Code of any DC coil up to 24 V or any AC coil up to 230 V	
	Triac output: 230 V AC	0.6	BMXDAO1605	>>>	LC1D09ee to LC1D38ee, LC1D40eee to LC1D80Aeee, LC1DT60Aeee to LC1DT80Aeee	Code of any AC coil up to 230 V (P7 code = 230 V)	
AVANTYS	Static output: 24 V DC	0.5	STBDDO3200		LC1D09●● to LC1D38●●	BL	
				>>>	LC1D40A••• to LC1D80A, LC1DT60A••• to LC1DT80A•••	BBE	
	Triac output: 230 V AC	2	STBDAO8210	>>>	LC1D09ee to LC1D38ee, LC1D40Aeee to LC1D80A, LC1DT60Aeee to LC1DT80Aeee	Code of any AC coil up to 230 V (P7 code = 230 V AC)	

Coils consumption characteristics

Coil type	Uc DC - min -max	Average consumption	Average consumption at UC DC / 20 °C			
		Inrush	Sealed			
BL	24 V - 0.8 Uc to 1.1 Uc	2.4 VA	2.4 W - 2.4 VA			
BBE		11 W - 12.5 VA	0.5 W - 0.5 VA			

⁽¹⁾ Replace dot by coil code. Ex LC1D09 • becomes LC1D09BL.

Contents

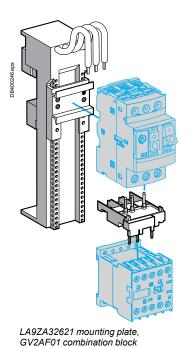
Motor starters mounting and wiring systems using TeSys D contactors and TeSys GV circuit breakers

Motor starters mounting and wiring systems Page Linergy BZ Snap-on mounting plates, busbar chassis Linergy HK Hot-plug, snap-on mounting plates, pluggable busbar TeSys GV Adapter plates, comb busbars TeSys SoLink Prefabricated monitoring/control wiring modules for motor starters

Mounting + power wiring system for TeSys D, GV

Linergy BZ

Snap-on mounting plates, busbar chassis



Motor starters applications

Linergy BZ is intended for compact, modular, motor starters composition: Direct-On-Line or reversing.

Every starter is composed of:

- 1 snap-on mounting plate + 1 GV2 or GV3 circuit breaker
- 1 snap-on mounting plate + 1 GV2 or GV3 circuit breaker
 - + 1 moulded connector + 1 LC1D contactor

■ 1 snap-on mounting plate + 1 TeSys U all-in-one starter.

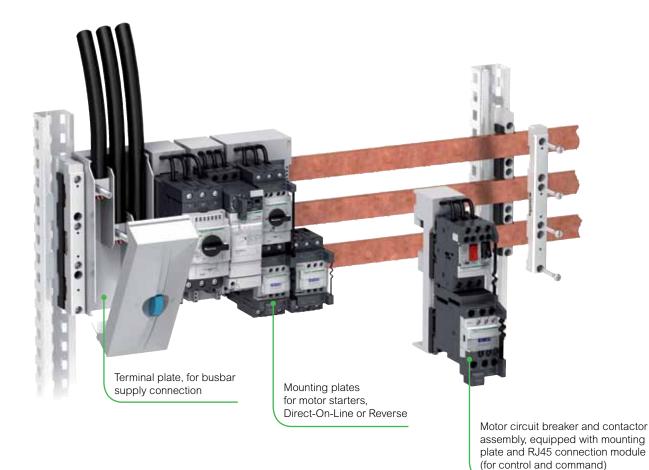
Mounting plates:

- 25, 32 or 63 A
- single, double width (45, 90 mm)
- DIN rail fixing bracket for c. b. + contactor assemblies.

Electrical power distribution applications

Linergy BZ provides power supply to the directly connected starters and branch

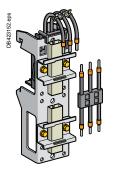
The busbar system is composed of mounting brackets, copper bars (not provided by Schneider Electric), terminals, connection modules, insulating covers.



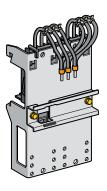
> For more details, download: TeSys - Motor control and protection components catalogue chapter B1 Catalogue ref MKTED210011EN

Linergy HK

Hot-plug, snap-on mounting plates, pluggable busbar



AK5PA232



AK5PA532

Motor starters applications

Linergy HK is intended for compact, modular, motor starters composition: Direct-On-Line or reversing.

Every starter is composed of:

- 1 pluggable mounting plate + 1 modular or GV2 or GV3 circuit breaker
- 1 pluggable mounting plate + 1 GV2 or GV3 circuit breaker
 - + 1 connector + 1 LC1D contactor

Or

■ 1 pluggable mounting plate + 1 TeSys U all-in-one starter.

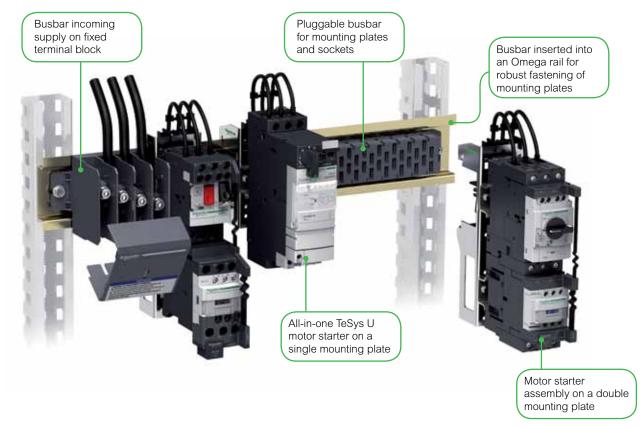
Mounting plates:

- 25 or 50 A
- single, double width (54, 108 mm)
- DIN rail fixing bracket for c. b. + contactor assemblies.

Electrical power distribution applications

Linergy HK provides power supply to the directly connected starters and branch circuits, with hot-plug possibilities for easier maintenance.

The busbar system is composed of omega rails, pluggable busbars with embedded supply terminal block, power sockets, connection modules.



> For more details, download: TeSys – Motor control and protection components catalogue - chapter B1 Catalogue ref MKTED210011EN

TeSys GV

Adapter plates, comb busbars

Motor starters applications

TeSys GV is intended for compact, modular, Direct-On-Line motor starters composition.

Every starter is composed of:

■ 1 LAD311 adapter plate (fixed on 2 parallel DIN rails) + 1 fuse carrier + 1 connector + 1 LC1D contactor

Or

■ 1 LAD311 adapter plate (fixed on 2 parallel DIN rails) + 1 GV2 circuit breaker + 1 connector + 1 LC1D contactor.

Adapter plates:

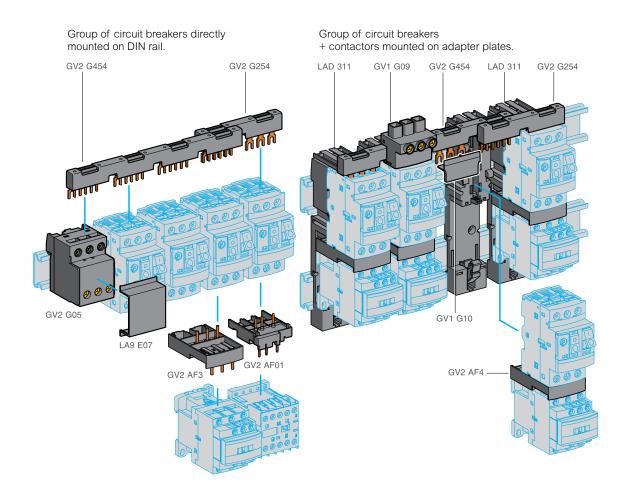
- For up to 32 A fuse or circuit breaker
- Single width (45 mm)
- DIN rail fixing bracket for c. b. + contactor assemblies.

Electrical power distributions applications

TeSys GV comb busbars and connectors offer provides power supply to the directly connected starter assemblies or single fuses or circuit breakers.

Combination blocks provide electrical liaison between fuses/circuit breakers and contactors.

The TeSys GV connection offer is composed of comb busbars, supply terminals, combination modules, adapter plates, combination blocks, protective covers.



> For more details, download: TeSys – Motor control and protection components catalogue - chapter B2 Catalogue ref MKTED210011EN

TeSys SoLink

Prefabricated motor starter monitoring/control wiring modules

Motor starters applications

TeSys SoLink is intended for motor starters control and monitoring circuits wiring: Direct-On-Line or reversing.

The main advantages are fast and reliable wiring, immediate connection, deconnection of the circuits by mean of a RJ45 plug.

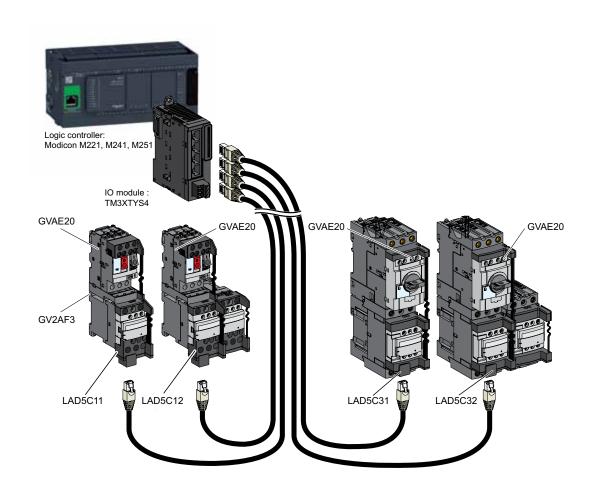
The control/monitoring RJ45 cables are compatible with various IO modules of the Schneider Electric offer.

Every starter is composed of:

■ 1 TeSys SoLink LADC connection module + 1 GV2 or GV3 circuit breaker + 1 GV2AF3 combinaison block + 1 GVAE20 auxiliary contact block + 1 or 2 LC1D contactors.

Connection modules:

- Up to 80 A circuit breakers
- single, double width
- Pin terminals + RJ45 connector.



> For more details, download: TeSys – Motor control and protection components catalogue - chapter B2 Catalogue ref MKTED210011EN

Coordinated Starters Selection tables

Coordinated starter solutions

Starters with BS fuses	27
Starters with built-in thermal overload protection	
circuit breaker	28
Starters with circuit breaker and thermal overload relay	29 to 30

Starters with NFC, DIN fuses type aM......24 to 26

Coordinated starter solutions

TeSys motor starters - open versionD.O.L starters with fuse protection (NF C or DIN fuses, type aM)

0.06 to 55 kW at 400/415 V: type 1 coordination											
Standard power ratings of 3-phase motors 50/60 Hz in category AC-3					0 Hz	Fuse carrier (1) aM fuse (basic block)	aM fuse	es Contactor		Thermal overload relay classe 10	
400/41	15 V	440 V		500 V		Reference	Size	Rating	Reference (2)	Reference	Setting
P	le	Р	le	Р	le						range
kW	Α	kW	Α	kW	Α			Α			Α
5.5	11.5	5.5	10.4	7.5	12.4	LS1D32	10 x 38	16	LC1K12	LR2K0321	1014
'.5	15.5	7.5	13.7	9	13.9	LS1D32	10 x 38	16	LC1D18	LRD21	1218
-	_	9	16.9	-	-	LS1D32	10 x 38	20	LC1D25	LRD21	1218
) 1	18.1 22	_ _ 11	- 20.1	11 15	17.6 23	GK1EK	14 x 51	25	LC1D25	LRD22	1624
15	29	15	26.5	18.5	28	GK1EK	14 x 51	32	LC1D32	LRD32	2332
18.5	35	18.5	32.8	22	33	GK1EK	14 x 51	40	LC1D40	LRD3355	3040
22	41	22	39	30	44	GS⊕J	22 x 58	50	LC1D50A	LRD350	3750
	_	30	51.5	-	_	GS⊕J	22 x 58	80	LC1D50A	LRD365	4865
-	_	-	-	37	53	GS⊕J	22 x 58	80	LC1D65A	LRD365	4865
80	55	37	64	-	-	GS⊕J	22 x 58	80	LC1D65A	LRD365	4865
7 ⁽³⁾	66	45	76	-	_	GS⊕J	22 x 58	100	LC1D80	LRD3363	6380
5	80	-	_	55	78	GS⊕J	22 x 58	100	LC1D95	LRD3365	8093
	_	55	90	-		GS⊕J	22 x 58	125	LC1D115	LRD4365	80104
5	97		_	75	106	GS∙J	22 x 58	125	LC1D115	LRD4367	95120

⁽¹⁾ For breaking under load, add a rotary switch-disconnector. (2) For reversing operation, replace the prefix LC1 with LC2. (3) 440 V maximum.