EasyPact TVS range

Motor Starter Solutions



Motor power AC3 - (kW)	0.06	2.2	4	5.5	7.5	11	15	18.5	22	30	37	45	55	75	90	132	160	200	250	335	(kW)
Contactors (LC1E...)	size 1						size 2	size 3			size 4		size 5		size 6		size 7		size 8	size 9	
Ie max. (A) AC-3 (400 V) - (A)	6	6	9	12	18	25	32	40	50	65	80	95	120	160	200	250	300	400	500	630	(A)
Ie max. (A) AC-1 (400 V) - (A)	20	20	25	25	32	36	50	60	70	80	110	120	150	200	250	300	320	500	700	1000	(A)
Width - (mm)	45	45	45	45	45	45	56	75	75	75	85	85	120	120	168.5	168.5	213	213	233	309	(mm)
Embedded contacts (NO/NC)	1 NO or 1 NC	1 NO or 1 NC	1 NO or 1 NC	1 NO or 1 NC	1 NO or 1 NC	1 NO or 1 NC	1 NO or 1 NC	1 NO + 1 NC	1 NO + 1 NC	1 NO + 1 NC	1 NO + 1 NC	1 NO + 1 NC	1 NO + 1 NC	1 NO + 1 NC	-	-	-	-	-	-	
References	LC1E06xxyy**	LC1E06xxyy	LC1E09xxyy	LC1E12xxyy	LC1E18xxyy	LC1E25xxyy	**LC1E32xxyy**	**LC1E40yy**	**LC1E50yy**	**LC1E65yy**	**LC1E80yy**	**LC1E95yy**	LC1E120yy	LC1E160yy	LC1E200yy	LC1E250yy	LC1E300yy	LC1E400yy	**LC1E500yy**	**LC1E630yy**	



Thermal overload relays (LRE...)	size 1						size 2	size 3			size 4		size 5		size 6		size 7		size 8	size 9	
Relay setting range - (A)	0.16...0.25	4...6	7...10	9...13	12...18	16..24	23...32	30...40	37...50	48...65	63...80	80...104	84...135	84...135	124...198	124...198	208...333	259...414	321...513	394...630	(A)
References	LRE02	LRE10	LRE14	LRE16	LRE21	LRE22	**LRE32**	LRE355	LRE357	LRE359	LRE361	LRE365	LRE482	LRE482	LRE483	LRE483	LRE486	LRE487	LRE488	LRE489	

Accessories (LAE...)***																					
Front auxiliary contact block	LAEN_ _	LAEN_ _	LAEN_ _	LAEN_ _	LAEN_ _	LAEN_ _	LAEN_ _	LAEN_ _	LAEN_ _	LAEN_ _	LAEN_ _	LAEN_ _	LAEN_ _	LAEN_ _	LAEN_ _	LAEN_ _	LAEN_ _	LAEN	LAEN	LAEN	
Time delay for Star Delta (≥ 25 A only)	-	-	-	-	-	LAETSD	LAETSD	LAETSD	LAETSD	LAETSD	LAETSD	LAETSD	LAETSD	LAETSD	LAETSD	LAETSD	LAETSD	LAETSD	LAETSD	LAETSD	
Reversor mechanical interlock	LAEM1	LAEM1	LAEM1	LAEM1	LAEM1	LAEM1	LAEM1	LAEM1	LAEM1	LAEM1	LAEM4	LAEM4	LAEM5	LAEM5	LAEM6	LAEM6	LAEM7	LAEM7	LAEM7	LAEM8	
Terminal block for relays LRE	LAEB1	LAEB1	LAEB1	LAEB1	LAEB1	LAEB1	LAEB1	LAEB3	LAEB3	LAEB3	LAEB3	LAEB3	NA*	NA*	NA*	NA*	NA*	NA*	NA*	NA*	

*NA: Non applicable (separate mounting without accessory)
**xx: 10 for 1NO contact, 01 for 1NC contact - yy: For coil selection see "Control voltage" table
*** For a more detailed accessories description see last page

4-pole Contactors



Contactors (LC1E...)	size 1				size 2			size 3		size 4		
Rated operational current AC-1	16	20	25	32	40	45	50	60	80	100	125	(A)
Width	45				56			84.5		95.5		(mm)
References	LC1E06	LC1E09	LC1E12	LC1E18	LC1E25	LC1E32	LC1E38	LC1E40	LC1E65	LC1E80	LC1E95	

Thermal-magnetic Motor Circuit Breakers

GZ1E



Setting range of thermal trips	0.1...0.16	0.16...0.25	0.25...0.40	0.40...0.63	0.63...1	1...1.6	1.6...2.5	2.5...4	(A)
Magnetic tripping current Id±20%	1.5	2.4	5	8	13	22.5	33.5	51	(A)
Reference	GZ1E01	GZ1E02	GZ1E03	GZ1E04	GZ1E05	GZ1E06	GZ1E07	GZ1E08	
Width	44.5	44.5	44.5	44.5	44.5	44.5	44.5	44.5	(mm)

	4...6.3	6...10	9...14	13...18	17...23	20...25	24...32	(A)
Magnetic tripping current Id±20%	78	138	170	223	327	327	416	(A)
Reference	GZ1E010	GZ1E14	GZ1E16	GZ1E20	GZ1E21	GZ1E22	GZ1E32	
Width	44.5	44.5	44.5	44.5	44.5	44.5	44.5	(mm)

Control relays

EasyPact TVS range benefit from **3 types of control relays**, with 4 Normally Opened (NO) and Normally Closed (NC) contacts. Control relay sales references begin with "**CAE**", followed by the number of NO/NC contacts.



CAE	
CAE**22**	= Control relay, with **2** NO + **2** NC contacts
CAE**31**	= Control relay, with **3** NO + **1** NC contacts
CAE**40**	= Control relay, with **4** NO + **0** NC contacts

EasyPact TVS

Sales references that mean something!

Examples of EasyPact TVS 3-pole solutions

DOL* starter 15 kW / 400 V · [1 Contactor] + (1 TOR)

[LC1E3210M5 + LAEN11] + (LRE32)

LC1E	All **contactors** begin with "**LC1E**" (contactors EasyPact TVS with 1 direct starter)
32	Rated operational current AC3 (here = 32 A).
10	With 1 contact: 1 Normally Opened (NO) + 0 Normaly Closed (NC)
M5	M5 = AC 220 V (50 Hz)
LAE	All **Accessories & Spare-parts** begin by "**LAE**"
N11	Auxiliary contact block fro**N**t mounting. With 2 contacts: 1 NO + 1 NC
LRE	All **thermal overload relays** (TOR) begin by "**LRE**"

* Direct on line.

Reversing starter · [2 Contactors] + (1 TOR (under 1 contactor))

[2 x LC1E65B5 + LAEM1] + (LRE359)

LC1E	**Contactors**
65	Rated operational current AC3 (here = 65 A)
B5	B5 = AC 24 V (50 Hz)
LAE	**Accessories & Spare-parts**
M1	Reversor **M**echanical interlock for EasyPact TVS contactor size 1
LRE	**Thermal overload relays**
3	**Size** (here = size 3)

Star-Delta starter · [3 Contactors] + (1 TOR (under 1 contactor))

[3 x LC1E0901 + LAETSD + LAEM1] + (LRE14)

LC1E	**Contactors**
0901	Rated operational current AC3 (here = 9 A).
LAE	**Accessories & Spare-parts**
TSD	**T**ime delay contact block for **S**tar-**D**elta.
M1	Reversor **M**echanical interlock for EasyPact TVS contactor size 1
LRE	**Thermal overload relays**

Control voltage

		24	48	110	220
LC1E06-300	50 Hz	B5	E5	F5	M5
	60 Hz	B6	-	F6	M6
LC1E06-95	50/60 Hz	B7	E7	F7	M7
LC1E400-630	50/60 Hz	-	E7	F7	M7
		240	380	415	440
LC1E06-300	50 Hz	U5	Q5	N5	R5
	60 Hz	-	Q6	-	R6
LC1E06-95	50/60 Hz	-	Q7	-	-
LC1E400-630	50/60 Hz	U7	Q7	N7	R7

Accessories

LAEN_ _	• Auxiliary contact blocks, front mounting
11	1NO + 1NC
20	2NO
02	2NC
22	2NO + 2NC
LAETSD	• Time delay auxiliary contact block (1-30 s)
For contactors ≥ 25 A	
LAEM_	• Reversor mechanical interlock
1	for contactor size 1 to 3
4	for contactor size 4
5	for contactor size 5
6	for contactor size 6
7	for contactor size 7 and 8
8	for contactor size 9
LAEB_	• Terminal block for relays LRE
1	for relay size 1
3	for relay size 3

LAEX…*: Separate coil
Ex.: **LAEX**1B5 means :
> Seperate coil for EasyPact TVS contactor size 1.
> AC 24 V (50 Hz).

Example of EasyPact TVS 4-pole solution

Switching resistive load / 220V · [1 Contactor]

[LC1E 32 004 M7

LC1E	**Contactors**
32	Rated operational current AC3 (here = 32 A).
004	4 Normally Opened(4 NO)
M7	M7=AC 220V (50/60 Hz)

Control voltage

		24	48	110	220	230
LC1E06-95	50/60 Hz	B7	E7	F7	M7	P7
		240	380	400	415	
LC1E06-95	50/60 Hz	U7	Q7	V7	N7	

The easy choice for simplicity and flexibility

Schneider Electric, the leader in the motor starter market for more than 90 years, has designed the EasyPact TVS range to provide you with the competitive solutions you were expecting.

EasyPact TVS motor starter and switching solution is the easy choice for simplicity and flexibility.







A cost-effective offer

> The best price for the performance and quality level you need.
> A maximum of solutions with an optimal number of products.
> Designed to perform the essential starter functions: control and overload protection.

Simple and intuitive

> Easy to install.
> Covering 80% of applications.
> With the key accessories to easily build lots of Do-It-Yourself solutions.
> With an intuitive sales reference system: easy to order, easy to understand and easy to remember.

Guaranteed availability

> Available from distributors.
> EasyPact TVS benefits fully from Schneider Electric global policies: in terms of production, distribution, quality, availability, service and after-sales support standards.

Overview

3 ways to build your motor starter

Thermal-magnetic motor circuit breaker (TeSys GV, EasyPact TVS GZ1E) + **EasyPact TVS contactor** (Contactor)

Or Magnetic circuit breaker (TeSys GV, Compact, EasyPact TVS GZ1E) + **EasyPact TVS starter** (Contactor + Thermal Overload Relay (TOR))

Or Switch disconnector-fuse (TeSys GS) + **EasyPact TVS starter** (Contactor + Thermal Overload Relay (TOR))

For simple applications

(ex.: HVAC, manufacturing, material handling, textile, etc.)

9 contactor sizes from 6 A to 630 A

> 2.2 kW to 335 kW (AC3/400 V).
> Width from 45 mm (6 A) to 309 mm (630 A).
> 3 poles.
> AC control.

4 thermal overload relay sizes from 0.1A to 630 A

> For all EasyPact TVS contactors.
> Class 10A.
> Direct mounting under contactors.

4 key accessory types

> Control: auxiliary contact block (LAEN).
> Reversor starter: mechanical interlock (LAEM).
> Star Delta: Time delay auxiliary contact block (LAETSD).
> Terminal block for thermal overload relay (LAEB).

1 control relay range

> 3 types with 4 NO/NC contacts.

1 thermal-magnetic motor circuit-breaker range

> from 0.1A to 32A.
> 3 poles.
> I_{cu} breaking capacity up to 100kA.

Standardized & certified solutions

> IEC 60947-4-1,
> IEC 60947-5-1,
> IEC60947-2,
> CCC,
> EAC.

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Motor starters

EasyPact TVS

The easy choice for simplicity and flexibility 2015



Schneider Electric

2 principles to build your starter solution



