

Life Is On

Schneider
Electric



 PriceList

Switching and Controlling Products

With effect from January 27th, 2020



se.com/in

EasyPact TVS

- > EasyPact TVS Power Contactors (3 Pole) 6
- > EasyPact TVS Power Contactors (4 Pole) 7
- > EasyPact TVS Contactor Accessories 8
- > EasyPact TVS Thermal Overload Relay 9
- > EasyPact TVS Circuit Breaker for Motor Protection 10

TeSys Control Range

- > TeSys Control Range 16
- > TeSys K Control Relays 17
- > TeSys K Power Contactors 17
- > TeSys K Accessories 18
- > TeSys D Control Relays 19
- > TeSys D Power Contactors (3 Pole) 19
- > TeSys D Green 21
- > TeSys D Green Electric Coil Contactor 22
- > TeSys D Accessories 23
- > TeSys F Power Contactors 29
- > TeSys F - Accessories 30
- > TeSys Special Purpose Contactor 32
- > TeSys H Ultra compact starters 35

TeSys Protection Range

- > TeSys Overload Relay 38
- > TeSys Electronic Over Current Relay 40
- > TeSys Motor Circuit Breakers 43
- > GV4LE 44
- > GV4PE 44
- > Accessories for GV4 45
- > Auxiliary Contact Blocks 45
- > Circuit Breakers for Motor Protection Accessories 46

Linergy

- > Linergy 50

TeSys Switches

- > TeSys Switches 53

TeSys Motor Monitoring

- > TeSys U 55
- > TeSys T - iMCC Relays 57

Starters

- > Enclosed Starters 59
- > TE Start & TeSys Motor Starters 60
- > Starters Spares 61

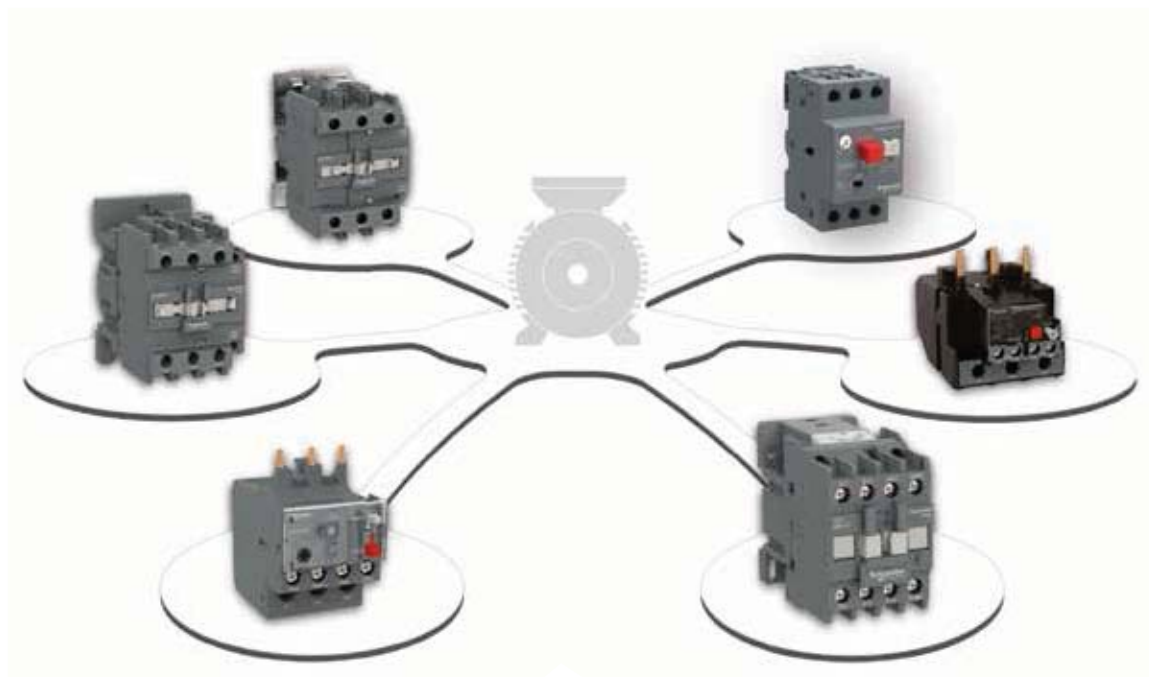
Selection Table

- > Type 2 Co-ordination charts - TeSys
 - Fuseless - Direct-on-Line starters with circuit-breaker (2 Products) . . . 62
 - Fuseless - Direct-on-Line starters with circuit-breaker (3 Products) . . . 63
 - Fuseless - Star Delta starters with circuit-breaker (3 Products) 64
 - Fuseless - Star Delta starters with circuit-breaker (2 Products) 65
 - Fuseless - Direct-on-Line starters with circuit-breaker (3 Products) . . . 66
- > Type 2 Co-ordination charts - EasyPact
 - Fuse based - Direct-on-Line starters (3 Products) 67
 - Fuse based - Star Delta starters (3 Products) 67
- > Selection Chart
 - Fuseless - Direct-on-Line starters with circuit-breaker (3 Products) . . . 68
 - Fuseless - Star Delta starters with circuit-breaker (3 Products) 69
 - Fuseless - Direct-on-Line starters with circuit-breaker (2 Products) . . . 70

EasyPact TVS

The Easy choice for simplicity and flexibility

- 3 Pole and 4 Pole Power Contactor
- Control Relays
- Thermal Overload Relay
- Circuit Breaker for Motor Protection
- Accessories



EasyPact TVS
Catalogue

Designed for the Essential



Selection Charts for
Motor Feeders for
IE2/IE3 Motors with
EasyPact TVS

W.E.F. January 27, 2020

EasyPact TVS

Power Contactors - ETVS(3 Pole AC Control)



- Conformance to IEC 60947-4-1, CE Marking
- Current Rating: 6A to 630A, AC-3 Rating
- Type 2 co-ordination chart available with Fuse, MPCB and MCCB.
- Wide Band Coil in 6-40B for 220 & 415V AC
- New dual frequency coil available for select coil ratings

Frame	[Ie] Rated Operational Current		Motor Power at 415V, 3Ph, 50Hz		Auxiliary Contacts		Reference	Unit MRP [₹]
	AC-1	AC-3	HP	kW	NO	NC		
FRAME-1	20	6	3	2.2	-	1	LC1E0601* <input checked="" type="checkbox"/>	895
					1	-	LC1E0610* <input checked="" type="checkbox"/>	
	25	9	5.5	4	-	1	LC1E0901* <input checked="" type="checkbox"/>	925
					1	-	LC1E0910* <input checked="" type="checkbox"/>	
	25	12	7.5	5.5	-	1	LC1E1201* <input checked="" type="checkbox"/>	1050
				1	-	LC1E1210* <input checked="" type="checkbox"/>		
FRAME-2	32	18	12	9	-	1	LC1E1801* <input checked="" type="checkbox"/>	1210
					1	-	LC1E1810* <input checked="" type="checkbox"/>	
	36	25	15	11	-	1	LC1E2501* <input checked="" type="checkbox"/>	1655
					1	-	LC1E2510* <input checked="" type="checkbox"/>	
	50	32	20	15	-	1	LC1E3201* <input checked="" type="checkbox"/>	3465
				1	-	LC1E3210* <input checked="" type="checkbox"/>		
FRAME-3	50	38	25	18.5	-	1	LC1E3801* <input checked="" type="checkbox"/>	4095
					1	-	LC1E3810* <input checked="" type="checkbox"/>	
	50	40	29	22	-	1	LC1E40B01**	4370
				1	-	LC1E40B10**		
FRAME-3	60	40	29	22	1	1	LC1E40* <input checked="" type="checkbox"/>	5355
	70	50	34	25/30	1	1	LC1E50* <input checked="" type="checkbox"/>	6510
	80	65	50	37	1	1	LC1E65* <input checked="" type="checkbox"/>	8820

Frame	[Ie] Rated Operational Current		Motor Power at 415V, 3Ph, 50Hz		Auxiliary Contacts		Reference	Unit LP [₹]
	AC-1	AC-3	HP	kW	NO	NC		
FRAME-4	110	80	60	45	1	1	LC1E80* <input checked="" type="checkbox"/>	11465
	120	95	60	45	1	1	LC1E95* <input checked="" type="checkbox"/>	13755
FRAME-5	150	120	75	55	1	1	LC1E120*	16380
	200	160	120	90	1	1	LC1E160*	21630
FRAME-6	250	200	150	110	-	-	LC1E200*	29770
	300	250	175	132	-	-	LC1E250*	39230
FRAME-7	320	300	215	160	-	-	LC1E300*	46965
	500	400	295	220	-	-	LC1E400*	59705
FRAME-8	700	500	375	280	-	-	LC1E500*	84095
FRAME-9	1000	630	500	375	-	-	LC1E630*	119385

* Reference to be completed by adding coil voltage code

Spare Coil for Contactors

Contactors	Reference	Unit LP [₹]
3 Pole Contactors		
LC1E06...E25	LAEX12**	860
LC1E32/E38	LAEX2**	1060
LC1E40/E65	LAEX3**	1575
LC1E80/E95	LAEX4**	1965
LC1E120/E160	LAEX5**	2185
LC1E200/E250	LAEX6**	3055
LC1E300	LAEX7**	3330

* Reference to be completed by adding coil voltage code

Coil Voltage Code

* VOLTAGE (V AC)	24	110	220	415
LC1E06..LC1E95	B7	F7	M7	N5
LC1E120..LC1E300	B5	F5	M5	N5
LC1E400..LC1E630	B7	F7	M7	N7
LC1E06.. LC1E40B	-	-	M5WB	N5WB

Non Standard Voltage/code: 48V AC/E5, 380V AC/Q5, 440V AC/R5

Please add ₹ 120/- while ordering Contactors with Non-standard Voltages.

** For more information contact regional sales office

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

NORMAL STOCK ITEMS

W.E.F. January 27, 2020

EasyPact TVS

Power Contactors - ETVS (4 Pole AC Control)



- Conformance to IEC 60947-4-1, CE Marking
- Current Rating: 20A to 125A, AC-1 rating
- Available in 4NO and 2NO+2NC Power Pole combination
- Wide Band Coil for all ratings in 220 & 415V AC

Frame	AC-1 Rating	Power Poles	Reference	Unit MRP [₹]	Power Poles	Reference	Unit MRP [₹]
FRAME-1	20	4NO	LC1E06004*IN	1145	2NO + 2NC	LC1E06008*IN	1365
	25	4NO	LC1E09004*IN	1210	2NO + 2NC	LC1E09008*IN	1470
	32	4NO	LC1E12004*IN	1260	2NO + 2NC	LC1E12008*IN	1575
	40	4NO	LC1E18004*IN	1575	2NO + 2NC	LC1E18008*IN	1585
FRAME-2	50	4NO	LC1E25004*IN	1995	2NO + 2NC	LC1E25008*IN	2835
	55	4NO	LC1E32004*IN	3360	2NO + 2NC	LC1E32008*IN	4515
	60	4NO	LC1E38004*IN	3940	2NO + 2NC	LC1E38008*IN	5565
FRAME-3	75	4NO	LC1E40004*IN	6250	2NO + 2NC	LC1E40008*IN	8400
	85	4NO	LC1E65004*IN	8455	2NO + 2NC	LC1E65008*IN	10500

Frame	AC-1 Rating	Power Poles	Reference	Unit LP [₹]	Power Poles	Reference	Unit LP [₹]
FRAME-4	110	4NO	LC1E80004*IN	10710	2NO + 2NC	LC1E80008*IN	14910
	125	4NO	LC1E95004*	12075	2NO + 2NC	LC1E95008*	17850

* Reference to be completed by adding coil voltage code

Control Relays - CAE, Conformance to IEC60947-5-1, CE Marking

Auxiliary Contacts		Reference	Unit MRP [₹]
NO	NC		
4	0	CAE40*	970
3	1	CAE31*	
2	2	CAE22*	

* Reference to be completed by adding coil voltage code

Spare Coil for Contactors

Contactors	Reference	Unit LP [₹]
4 Pole Contactors		
LC1E0600*....LC1E1800*	LAEX1T**	990
LC1E2500*....LC1E3800*	LAEX2T**	1185
LC1E4000*....LC1E9500*	LAEX4T**	2095
Control Contactors		
CAE*	LAEX12**	860

* Reference to be completed by adding coil voltage code

Coil Voltage Code

* Voltage (V AC)	24	110	220	415
LC1E0600*...9500* 50/60 Hz	B7	F7	-	-
LC1E0600*...9500* 50 Hz/ Wide Band	-	-	M5WB	N5WB
Control relay CAE 50 Hz	B5	F5	M5	N5

Note:

- 4P power contactor also available at 48V AC E7 and 380V AC Q7
- Add ₹120 while ordering non-standard voltages

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

NORMAL STOCK ITEMS

W.E.F. January 27, 2020

Accessories - For ETVS Contactors

Description	For Use with	Mounting	Contacts	Reference	Unit LP [₹]
Auxiliary contact block	LC1E06.....E630 - 3Pole contactors LC1E0600.....LC1E9500 - 4Pole contactors CAE Control Relays (Refer Accessory compatibility Tables)	FRONT	1NO+1NC	LAEN11 <input checked="" type="checkbox"/>	265
			2NO	LAEN20 <input checked="" type="checkbox"/>	
			2NC	LAEN02 <input checked="" type="checkbox"/>	315
			2NO+2NC	LAEN22 <input checked="" type="checkbox"/>	
			4NO	LAEN40 <input checked="" type="checkbox"/>	485
Star delta timer	SD starters to be built with Electronic timers			MSMI06	1870
Changeover timer	LC1E25..E630			LAETSD <input checked="" type="checkbox"/>	2205

Description	For Use with	Coil Voltage	Reference	Unit LP [₹]
Surge suppressor*	LC1E06...E95 & CAE	24..48V AC	LAERCE	850
	LC1E06...E95 & CAE	50..127V AC	LAERCG	
	LC1E06...E95 & CAE	110..240V AC	LAERCU	620
	LC1E06...E95 & CAE	380..415V AC	LAERCN	850

*For higher rating contactors, contact nearest sales office

Description	3 Pole contactors	4 Pole contactors	Reference	Unit LP [₹]
Mechanical Interlock	LC1E06..E65	LC1E0600*..E3800*	LAEM1	550
	LC1E80/E95	LC1E4000*...LC1E9500*	LAEM4	1800
	LC1E120..E160		LAEM5	3355
	LC1E200/E250		LAEM6	3420
	LC1E300/E400/E500		LAEM7	4345
	LC1E630		LAEM8	4970

*Reference to be completed by adding coil voltage

3 Pole Accessories compatibility

Contactor	Built in contacts	LAEN**	LAERC*	LAEM
LC1E06	1NO or 1NC	1	1	1
LC1E09				
LC1E12				
LC1E18				
LC1E25				
LC1E32				
LC1E38				
LC1E40B				
LC1E40	1NO + 1NC	1	1	1
LC1E50				
LC1E65				
LC1E80				
LC1E95				
LC1E120				
LC1E160	-	2	-	-
LC1E200				
LC1E250				
LC1E300				
LC1E400				
LC1E500				
LC1E630				

4 Pole Accessories compatibility

Contactor	LAEN**	LAEM	LAERC*
LC1E06	1	1	1
LC1E09			
LC1E12			
LC1E18			
LC1E25			
LC1E32			
LC1E38			
LC1E40			
LC1E50			
LC1E65			
LC1E80			
LC1E95			

Control Relay Accessories Compatibility

Control Relay	LAEN*	LAERC
CAE	1 of LAEN11 or LAEN20 or LAEN02 or LAEN22	1

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

NORMAL STOCK ITEMS

W.E.F. January 27, 2020

EasyPact TVS

Thermal Overload Relay - ETVS



- Conformance to IEC 60947-4-1, CE Marking
- Range : 0.1A to 630A
- Tripping Class : 10A
- Direct & Independent mounting

Thermal Protection Adjustment Range	For Use with Contactor	Reference	Unit MRP [₹]	
LRE				
0.1...0.16	E06...E38	LRE01	1500	
0.16...0.25	E06...E38	LRE02		
0.25...0.4	E06...E38	LRE03		
0.4...0.63	E06...E38	LRE04		
0.63...1	E06...E38	LRE05 ✓		
1...1.6	E06...E38	LRE06 ✓		
1.6...2.5	E06...E38	LRE07 ✓		
2.5...4	E06...E38	LRE08 ✓		
4...6	E06...E38	LRE10 ✓		
5.5...8	E09...E38	LRE12 ✓		
7...10	E09...E38	LRE14 ✓	1660	
9...13	E12...E38	LRE16 ✓		
12...18	E18...E38	LRE21 ✓		
16...24	E25...E38	LRE22 ✓		
23...32	E25...E38	LRE32 ✓		
30...38	E38	LRE35 ✓		
17...25	E40...E95	LRE322		3265
23...32	E40...E95	LRE353		
30...40	E40...E95	LRE355		
37...50	E50...E95	LRE357 ✓		
48...65	E65...E95	LRE359		

Thermal Protection Adjustment Range	For Use with Contactor	Reference	Unit LP [₹]
LRE			
55...70	E80...E95	LRE361	4975
63...80	E80...E95	LRE363	5085
80...104	E95	LRE365	
51...81	E120...E300	LRE480	9525
62...99	E120...E300	LRE481	
84...135	E120...E300	LRE482	
124...198	E160...E300	LRE483	
146...234	E200...E300	LRE484	
174...279	E250...E300	LRE485	10380
208...333	E300	LRE486	
258...414	E300...E400	LRE487	12625
321...513	E500	LRE488	13695
394...630	E630	LRE489	14765

Accessories for Relay

Accessory	For Relay	Reference	Unit MRP [₹]
Separate Mounting Block	LRE01...LRE35	LAEB1	500
	LRE322...LRE365	LAEB3	1150

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

✓ NORMAL STOCK ITEMS

W.E.F. January 27, 2020

EasyPact TVS

Circuit Breaker for Motor Protection - GZ1* - Pushbutton control



- Conformance to IEC60947-1,-2,-4, CE Marking
- Range : 0.1A to 32A
- Short Circuit and Overload Protection
- Breaking Capacity upto 100KA

Breaking Capacity at 415 V 50 Hz	Motor Power AC3**		Thermal Protection Adjustment Range (A)	Reference	Unit MRP [₹]
	kW	hP			
100 kA	-	-	0.1 - 0.16	GZ1E01	2700
	0.06	-	0.16 - 0.25	GZ1E02	
	0.09	-	0.25 - 0.40	GZ1E03	
	0.18	-	0.40 - 0.63	GZ1E04	
	0.37	0.5	0.63 - 1.0	GZ1E05	3145
	0.55	0.75	1.0 - 1.6	GZ1E06	
	0.75	1	1.6 - 2.5	GZ1E07	3080
	1.1	2	2.5 - 4	GZ1E08	
	2.2	3	4 - 6.3	GZ1E10	3200
	3	5.5	6 - 10	GZ1E14	
10 kA	5.5	7.5	9 - 14	GZ1E16	3415
	7.5	10	13 - 18	GZ1E20	3850
	9	12.5	17 - 23	GZ1E21	4185
	11	15	20 - 25	GZ1E22	4410
	15	20	24 - 32	GZ1E32	4630
					8265

Accessories - ETVS Circuit Breaker for Motor Protection

Description	Mounting	Contacts	Reference	Unit LP [₹]
Auxillary Contact Block	LH side Mounted	1NO+1NC	GZ1AN11	500
		2NO	GZ1AN20	520

Description	Mounting	Range	Reference	Unit LP [₹]	
Electric Trips					
Undervoltage	RH Side Mounted	110...115V	50Hz	GZ1AU115	1800
		220...240V	50Hz	GZ1AU225	
		380...400V	50Hz	GZ1AU385	
Shunt trip		110...115V	50Hz	GZ1AS115	
		220...240V	50Hz	GZ1AS225	

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

NORMAL STOCK ITEMS

W.E.F. January 27, 2020



Start smart, run smart, stay smart with TeSys

Solutions that switch, protect,
control, and monitor motors



How do everlinks
improve power
connection reliability?

For more information on
switching and motor
management scan!



se.com/in/TeSys

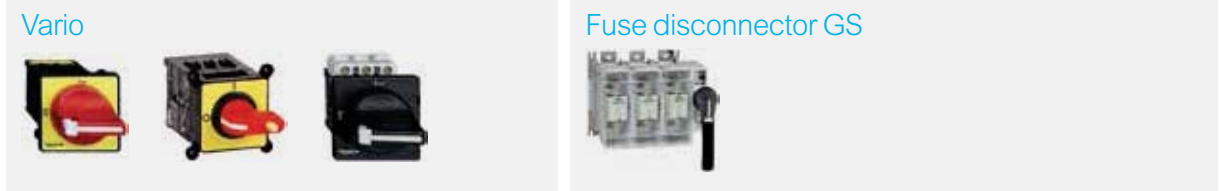
Life Is On

Schneider
Electric

TeSys Range

The most comprehensive solution for switching and motor management.

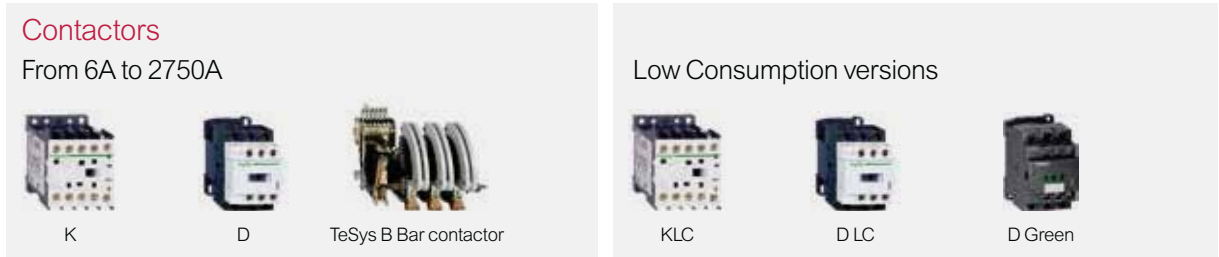
Switch Disconnectors



Protection



Control



For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

NORMAL STOCK ITEMS

W.E.F. January 27, 2020

TeSys Range



Monitor

Vario Compact starter



TeSys U

For standard application



TeSys U

For high-end management



TeSys T

The flexible motor management system for all applications and motors up to 810A (AC3)



Enclosed

DOL starters with manual control



Vario



Mini Vario



GV2M



GV2P/3P

Starters



LE-up to 30kW/400V

For DOL starters and safety applications



LG, LJ



GV2M



Specific Applications

For protection

Thermistor Protection unit



LT3

Advanced Motor Protection relay



Digital EOCR

Electromechanic overcurrent relay



EOCRSS

Transformers and high current peak



GV2RT

Single pole magnetic over current relay



RM1

Fuse solution



GK1

For control

For wind turbine UPS panels



F

For very small machines



SK

For capacitors



D

For modular enclosures / Din rail



3 poles-SKGC



GC



Dual Tariff GY



Impulse relay GF

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

NORMAL STOCK ITEMS

W.E.F. January 27, 2020

Machine builders, it is time to cut engineering time and costs — DIGITIZE load management

TeSys island

Unique features

TeSys island is a smart, digital multifunctional load management system; it can switch, protect, manage motors and other electrical loads up to 80 Amps (AC3) in an electrical control panel.

Benefits

Why should you choose TeSys island?

- Quicker engineering and reduce time to market
- Embedded algorithms detect abnormal load behaviors and generate alarms before machine stoppage.
- Pre-trip warnings can also be set on the system for scheduled maintenance.
- Fast device replacement on any portion of the island is possible because of the full integration of the system and the integrated Bus coupler resulting in reduced downtime.
- TeSys island provides energy monitoring at the load level
- Health status can be easily accessed, remotely or locally. This energy management data can be used for advanced analytics to increase machine efficiency further
- TeSys island can be easily integrated into Schneider Electric's EcoStruxure Machine architecture and 3rd party automation systems, supporting all major fieldbuses.



TeSys Range

Enable smarter design and engineering

Efficient

Make your machines intelligent, save time and costs with intuitive programming and commissioning using TeSys avatars. Simplify software integration within all major automation environments. One-click mounting on DIN rail and no need for control wiring.

Enable new business models

Use load data and status information to create new service enabled business models. Access your machine from remote during operation & maintenance.

A data provider

Get relevant data for digital load management & advanced analytics. Monitor energy at load level, remote users can easily check health status, troubleshoot and diagnose issues and take action, reduce machine stoppages and machine downtime.

Improved security

Benefit from the highest cybersecurity and safety levels. Safety IO / Scalable with embedded diagnostic.

Technical specifications

- System consists of DOL Starters & Input / Output modules
- System manages motors and other electrical loads up to 80A/37kW/50hp
- Up to 20 modules / 1 meter at one bus coupler
- No mechanical adjustments/settings required
- International standards-compliant
- Energy monitoring at the load level
- Only 21 commercial references for the complete system, including 5 standard motor starters and 5 functional safety motor starters
- Cybersecurity embedded into the system (Achilles Level 2 & Safety up to Cat 2)
- Safety stop TUV certified (Stop 0 and 1 with wiring categories 1 to 2, suitable for PL c,d (Performance Level) and SIL level 2)
- Open connectivity thanks to Ethernet IP and Modbus TCP fieldbuses

TeSys Control Range

TeSys Control Range	Frame Size	Rated operational current AC-1	AC-3 Duty			Aux Contacts	AC control Reference	Unit MRP [₹]	DC Control Reference	Unit MRP [₹]
			KW	HP	A					
TeSys K	FRAME-1	-	3	-	6	1NO/NC	LC1K06*	1050	LP1K06**	1575
		-	5.5	-	9	1NO/NC	LC1K09*	1115	LP1K09**	1735
		-	7.5	-	12	1NO/NC	LC1K12*	1220	LP1K12**	1945
		-	10	-	16	1NO/NC	LC1K16*	1460	-	-
TeSys D	FRAME-2	32	9	12.5	18	1NO + 1NC	LC1D18*	1700	LC1D18**	2900
		40	11	15	25	1NO + 1NC	LC1D25*	2110	LC1D25**	3800
	FRAME-3	50	15	20	32	1NO + 1NC	LC1D32*	4180	LC1D32**	7760
		50	18.5	25	38	1NO + 1NC	LC1D38*	6010	LC1D38**	9100
	FRAME-4	60	22	30	40	1NO + 1NC	LC1D40A*	6375	LC1D40A#	10975
		80	25	35	50	1NO + 1NC	LC1D50A*	7995	LC1D50A#	13065
		80	37	50	65	1NO + 1NC	LC1D65A*	11130	LC1D65A#	14630
		80	37	50	80	1NO + 1NC	LC1D80A*	13650	LC1D80A#	17765
	FRAME-5	125	45	60	80	1NO + 1NC	LC1D80*	16500	LC1D80**	18705
		125	45	60	95	1NO + 1NC	LC1D95*	17090	LC1D95**	21000
		250	59	80	115	1NO + 1NC	LC1D115*	21100	LC1D115**	21895
250		80	110	150	1NO + 1NC	LC1D150*	27430	LC1D150**	28425	

TeSys Control Range	[Ie] Rated Operational Current AC-1	AC-3 DUTY			Reference ^{(1) (2)}	Unit LP [₹]
		KW	HP	A		
TeSys F	275	100	135	185	LC1F185	29960
	315	110	150	225	LC1F225	32635
	350	140	190	265	LC1F265	39590
	400	180	245	330	LC1F330	49220
	500	220	300	400	LC1F400	54035
	700	280	380	500	LC1F500	77575
	1000	375	500	630	LC1F630	124120
	1000	450	610	800	LC1F800	192600
	1250	630	840	1000	LC1F1000	333840

Note:

(1) Contactor reference does not include coil. Contactor coil & aux. contacts to be ordered separately. (Coil includes 1NO contact)

(2) Please select coils from Page 30.

Coil Voltage Code

Type	Voltage	24	110	220	415
AC*	LC1K06-K16, LC1D09-D150 50/60Hz	B7	F7	M7	N7
DC**	LP1K06-K12, LC1D09-38, LC1D80-150	BD	FD	MD	

Type	Voltage	24V DC Low consumption	24-60V AC/DC	48-130V AC/DC	100-250V AC/DC
TeSys D Green#	LC1D40A-80A	BBE	BNE	EHE	KUE

Note: For ordering contactors with other coil voltages & frequencies, please add ₹ 190/- to the unit Price of the standard contactor of the same rating.



How to ensure reliability of contacts?

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

NORMAL STOCK ITEMS

W.E.F. January 27, 2020

Control Relays - K Model (AC & DC Control)



- Conformance IEC, UL, CSA, CE Marking
- Inbuilt 4 auxiliary contacts
- 10A thermal rating
- Available with AC (50/60Hz Dual frequency), DC & DC low consumption coil options

No of Poles	AC Control Reference	Unit LP [₹]	DC Control Reference ⁽⁴⁾	Unit LP [₹]	DC low consumption Reference ^{(1) (2) (3)}	Unit LP [₹]
2NO + 2NC	CA2KN22*	1210	CA3KN22**	1680	CA4KN22***	2050
3NO + 1NC	CA2KN31*		CA3KN31**		CA4KN31***	
4NO	CA2KN40*		CA4KN40***			

(1) Compatible with PLC outputs

(2) Wide range coil (0.7...1.25Uc), suppressor fitted as standard

(3) 2 pole auxiliary contact block can be mounted additionally

(4) Optional in-built surge suppressor available

Power Contactors - K Model (3 Pole AC & DC Control)



- Conformance to IEC, UL, CSA
- Current Rating : 6A to 16A, AC-3 duty
- 1NO or 1NC inbuilt auxiliary contact
- Available in 3P & 4P version
- Available with AC (50/60Hz Dual frequency), DC & DC low consumption⁽⁵⁾ coil options

[le] Rated Operational Current (A)	Motor Power (kW)	Auxiliary Contacts	AC Control Reference	Unit LP [₹]	DC Control Reference ⁽⁵⁾	Unit LP [₹]
6	3	1NC	LC1K0601*	1050	LP1K0601**	1575
		1NO	LC1K0610*		LP1K0610**	
9	5.5	1NC	LC1K0901*	1115	LP1K0901**	1735
		1NO	LC1K0910*		LP1K0910**	
12	7.5	1NC	LC1K1201*	1220	LP1K1201**	1945
		1NO	LC1K1210*		LP1K1210**	
16	10	1NC	LC1K1601*	1460	-	-
		1NO	LC1K1610*		-	-

(5) For low consumption offer, please contact regional sales office

Reversing Contactors - K Model



- Conformance to IEC, UL, CSA, CE
- Current Rating : 6A to 16A, AC-3 duty
- 1NO or 1NC inbuilt auxiliary contact
- Available in 3P & 4P version
- Available with AC(50/60Hz Dual frequency), DC & DC low consumption⁽⁶⁾ coil options

[le] Rated Operational Current (A)	Motor Power (kW)	Auxiliary Contacts	AC Control Reference	Unit LP [₹]
6	3	1NC	LC2K0601*	3390
		1NO	LC2K0610*	
9	5.5	1NC	LC2K0901*	3620
		1NO	LC2K0910*	
12	7.5	1NC	LC2K1201*	3725
		1NO	LC2K1210*	
16	10	1NC	LC2K1601*	4160
		1NO	LC2K1610*	

* Reference to be completed by adding coil voltage code

(6) For current rating and ref please contact Customer Care

Coil Voltage Code

Type	Voltage	24	48	72	110	220	415
AC*	CA2KN, LC1-K06 to K16, 50/60Hz	B7	-	-	F7	M7	N7
	LC2-K06 to K16, 50/60Hz	-	-	-	F7	M7	N7
DC**	CA3KN, LP1-K06 to K12	BD	-	-	FD	MD	-
DC low consumption***	CA4KN	BW3	EW3	SW3	-	-	-

Note: For ordering contactors with other coil voltages & frequencies, please add ₹ 190/- to the unit Price of the standard contactor of the same rating.

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

NORMAL STOCK ITEMS

W.E.F. January 27, 2020

Accessories - K Model

Description	Mounting	Contacts	Reference	Unit LP [₹]
Auxiliary contact block	Front	2NC	LA1KN02	420
		1NO + 1NC	LA1KN11 <input checked="" type="checkbox"/>	385
		2NO	LA1KN20	420
		4NC	LA1KN04	655
		1NO + 3NC	LA1KN13	
		2NO + 2NC	LA1KN22 <input checked="" type="checkbox"/>	
		3NO + 1NC	LA1KN31	
		4NO	LA1KN40	

Description	Control Voltage	Range	Reference	Unit LP [₹]
On Delay Electronic Timer	24..48V AC/DC	1..30S	LA2KT2E(1)	2160
	110..240V AC	1..30S	LA2KT2UA(1)	

Description	Coil Voltage	Reference	Unit LP [₹]
Surge Suppressor - RC Circuit	220..250V AC	LA4KA1U*	670
Surge Suppressor - Varistor	130..250V AC/DC	LA4KE1UG*	
Surge Suppressor - Varistor	50..129V AC/DC	LA4KE1FC*	

* Lot size 5

(1) Front mounted with common point changeover contact

Control Relays - D Model (AC & DC Control)



- Conformance to IEC, UL, CSA
- 5 inbuilt auxiliary contacts, in just 2 variants
- Available with AC (50/60Hz Dual frequency), DC & DC low consumption coil options
- High Operating ambient temperature upto 60 Deg C
- Inbuilt surge suppressor for DC & DC low consumption

No of Poles	AC Control Reference	Unit MRP [₹]	DC Control Reference ⁽²⁾	Unit MRP [₹]	DC low consumption Reference ^{(1) (2) (3)}	Unit MRP [₹]
3NO + 2NC	CAD32*	1315	CAD32**	1890	CAD32***	2260
5NO	CAD50*		CAD50**		CAD50***	

(1) Compatible with PLC outputs

(2) Wide range coil (0.7...1.25Uc), suppressor fitted as standard

(3) 2 pole auxiliary block can be mounted

Power Contactors - D Model (3 Pole AC & DC Control)



- Conformance to IEC, UL, CSA
- Current Rating : 9A to 150A
- Available with AC (50/60Hz Dual frequency), DC & DC low consumption coil options
- High Operating ambient temperature, no derating upto 60 Deg C
- Inbuilt 1NO + 1NC auxiliary contacts upto 150A
- High electrical and mechanical life
- Fuse-less Type 2 Co-ordination Charts available
- EverLink® terminal for 40, 50, 65 & 80A contactors
- Inbuilt surge suppressor in DC coil for 9-80A

[Ie] Rated Operational Current AC-1	kW	AC-3 Duty		Auxiliary Contacts	AC Control Reference	Unit MRP [₹]	DC Control Reference ⁽¹⁾	Unit MRP [₹]
		HP	A					
25	4	5.5	9	1NO + 1NC	LC1D09* <input checked="" type="checkbox"/>	1305	LC1D09** <input checked="" type="checkbox"/>	2100
	5.5	7.5	12	1NO + 1NC	LC1D12* <input checked="" type="checkbox"/>	1470	LC1D12** <input checked="" type="checkbox"/>	2350
32	9	12.5	18	1NO + 1NC	LC1D18* <input checked="" type="checkbox"/>	1700	LC1D18** <input checked="" type="checkbox"/>	2900
40	11	15	25	1NO + 1NC	LC1D25* <input checked="" type="checkbox"/>	2110	LC1D25** <input checked="" type="checkbox"/>	3800
50	15	20	32	1NO + 1NC	LC1D32* <input checked="" type="checkbox"/>	4180	LC1D32** <input checked="" type="checkbox"/>	7760
	18.5	25	38	1NO + 1NC	LC1D38* <input checked="" type="checkbox"/>	6010	LC1D38** <input checked="" type="checkbox"/>	9100
60	22	30	40	1NO + 1NC	LC1D40A* <input checked="" type="checkbox"/>	6375	LC1D40A#	10975
80	25	35	50	1NO + 1NC	LC1D50A* <input checked="" type="checkbox"/>	7995	LC1D50A#	13065
80	37	50	65	1NO + 1NC	LC1D65A* <input checked="" type="checkbox"/>	11130	LC1D65A#	14630
80	37	50	80	1NO + 1NC	LC1D80A* <input checked="" type="checkbox"/>	13650	LC1D80A#	17765
125	45	60	80	1NO + 1NC	LC1D80* <input checked="" type="checkbox"/>	16500	LC1D80**	18705
	45	60	95	1NO + 1NC	LC1D95* <input checked="" type="checkbox"/>	17090	LC1D95**	21000
250	59	80	115	1NO + 1NC	LC1D115* <input checked="" type="checkbox"/>	21100	LC1D115**	21895
	80	110	150	1NO + 1NC	LC1D150* <input checked="" type="checkbox"/>	27430	LC1D150**	28425

* Reference to be completed by adding coil voltage code

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

NORMAL STOCK ITEMS

W.E.F. January 27, 2020

Power Contactors - D Model (3 Pole DC Low Consumption)

Now available upto 80A with the TeSys D Green Low Consumption offer

[Ie] Rated Operational Current AC-1	kW	Motor Power AC-3 HP	A	Auxiliary Contacts	Reference	Unit LP [₹]
25	4	5.5	9	1NO + 1NC	LC1D09**** <input checked="" type="checkbox"/>	2245
	5.5	7.5	12	1NO + 1NC	LC1D12**** <input checked="" type="checkbox"/>	2520
32	9	12.5	18	1NO + 1NC	LC1D18**** <input checked="" type="checkbox"/>	3835
40	11	15	25	1NO + 1NC	LC1D25**** <input checked="" type="checkbox"/>	4725
50	15	20	32	1NO + 1NC	LC1D32**** <input checked="" type="checkbox"/>	8035

[Ie] Rated Operational Current AC-1	kW	Motor Power AC-3 HP	A	Auxiliary Contacts	Reference	Unit LP [₹]
60	22	30	40	1NO + 1NC	LC1D40A#	10975
80	25	35	50	1NO + 1NC	LC1D50A#	13065
80	37	50	65	1NO + 1NC	LC1D65A#	14630
80	37	50	80	1NO + 1NC	LC1D80A#	17765

* Reference to be completed by adding coil voltage code

Power Contactors - D Model (4 Pole AC & DC Control)



- Conformance to IEC, UL, CSA
- Current Rating : 20A to 250A, AC-1 Rating
- Available with AC (50/60Hz Dual frequency), DC & DC low consumption (1) coil options
- High Operating ambient temperature, no derating upto 60 deg C

[Ie] Rated Operational Current AC-1	Poles Composition	AC control Reference	Unit MRP [₹]	DC control Reference	Unit MRP [₹]
20	4NO	-	-	LC1DT20**	2415
	2NO + 2NC	-	-	LC1D098**	2625
25	4NO	-	-	LC1DT25**	2890
	2NO + 2NC	-	-	LC1D128**	3780
32	4NO	-	-	LC1DT32**	3180
	2NO + 2NC	-	-	LC1D188**	4305
40	4NO	-	-	LC1DT40**	4990
	2NO + 2NC	-	-	LC1D258**	6575
60	4NO	-	-	LC1DT60A#	9985
	2NO + 2NC	-	-	LP1D40008**	13125

[Ie] Rated Operational Current AC-1	Poles Composition	AC control Reference	Unit LP [₹]	DC control Reference	Unit LP [₹]
80	4NO	-	-	LC1DT80A#	14900
	2NO + 2NC	-	-	LP1D65008**	17640
125	4NO	-	-	LP1D80004**	19110
	2NO + 2NC	-	-	LP1D80008**	22050
250	4NO	LC1D1150046*	24745	LC1D1150046**	26765

* Reference to be completed by adding coil voltage code

Coil Voltage Code

Type	Voltage	24	48	72	110	220	415
AC*	CAD, LC1D09-D150 50/60 Hz	B7			F7	M7	N7
	LC1D1150046 50/60 Hz				F7	M7	N7
DC**	CAD, LC1D09-D38, LC1D80-D150	BD			FD	MD	
	LC1DT20-DT40, LC1D098-D258, LP1D40-D80, LC1D115	BD			FD	MD	
DC Low Consumption***	CAD	BL			FL	ML	
	LC1D09-D32	BL	EL	SL			

Type	Voltage	24V DC Low consumption	24-60V AC/DC	48-130V AC/DC	100-250V AC/DC
TeSys D Green#	LC1D40A-80A, LC1DT60A-DT80A	BBE	BNE	EHE	KUE

Note: Please contact Customer Care for 4 Pole AC coil contactor details

For ordering contactors with other coil voltages & frequencies, please add ₹ 190/- to the unit price of the standard contactor of the same rating.

(1) For current rating and ref please contact Customer Care

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

NORMAL STOCK ITEMS

W.E.F. January 27, 2020



TeSys D Green

The Revolutionary Electronic Coil Contactor



Green Premium™
Product

New
80A AC3
offer available
in 55mm frame



3 frame sizes	9 to 18A	25 to 38A	40 to 80A
	24 to 60V	48 to 130V	
3 coil ratings	110 to 250V		
	Universal AC/DC coil		
Low consumption offer 40-80A			



Reliability - Improved under voltage performance, low contact bounce.



Efficiency - 80% less coil consumption, reduced heat dissipation



Productivity - Easier integration with automation architectures



Flexibility - Wide voltage bands, eliminate surge suppressor



Scan to see TeSys D Green under voltage performance.

Tesys D Green Contactor (3 Pole AC/DC Universal Coil)



- Current Rating: 9-65A
- Universal AC/DC coil from 24 - 250V
- Special low consumption offer from 40-80A
- Fuseless Type 2 Co-ordination charts available

The Revolutionary Electronic Coil Contactor

[Ie] Rated Operational Current AC-1	AC-3 Duty (Long Life)			Auxiliary Contacts	Reference	Unit LP [₹]
	kW	HP	A			
25	4	5.5	9	1NO + 1NC	LC1D09*	2850
	5.5	7.5	12	1NO + 1NC	LC1D12*	2950
32	9	12.5	18	1NO + 1NC	LC1D18*	3900
40	11	15	25	1NO + 1NC	LC1D25*	4650
50	15	20	32	1NO + 1NC	LC1D32*	9450
	18.5	25	38	1NO + 1NC	LC1D38*	10200
60	22	30	40	1NO + 1NC	LC1D40A*	10975
80	25	35	50	1NO + 1NC	LC1D50A*	13065
80	37	50	65	1NO + 1NC	LC1D65A*	14630
80	37	50	80	1NO + 1NC	LC1D80A*	17765

Power Contactors - TeSys D Green (4 Pole AC & DC Control)

[Ie] Rated Operational Current AC-1	Poles Composition	Auxiliary Contacts	DC control Reference	Unit MRP [₹]
60	4NO	1NO + 1NC	LC1DT60A*	9985
80	4NO	1NO + 1NC	LC1DT80A*	14900

Coil Voltage Code

Type	Voltage	24-60V AC/DC	48-130V AC/DC	100-250V AC/DC
AC/DC*	LC1D09 - D38, LC1D40A - 80A, LC1DT60A - 80A	BNE	EHE	KUE
24V DC Low Consumption*	LC1D40A - 80A, LC1DT60A - 80A	BBE (24V DC only)		



Check the features of the TeSys D Green

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

NORMAL STOCK ITEMS

W.E.F. January 27, 2020

Description	For use with	Reference	Unit LP [₹]
Power connection accessories			
Terminal block	For supply to one or more GV2 G busbar sets	GV1G09	1550
Set of 63A busbars for paralleling of contactors	2 contactors LC1D09...D18 or D25...D38	GV2G245	1200
	4 contactors LC1D09...D18 or D25...D38	GV2G445	1895
Set of 115A busbars for paralleling of contactors	2 contactors LC1D40A...D80A	GV3G264	2160
	3 contactors LC1D40A...D80A	GV3G364 ⁽¹⁾	1150
Set of S-shape busbars	For circuit breakers GV3P** & GV3L** and contactors LC1 D40A...D65A	GV3S	865

**Not applicable for GV3P/GV3L 73A and 80A



GV2G245

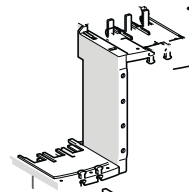


GV1G09

Description	For use with	Reference	Unit LP [₹]
Mechanical interlock	LC1D09 to D38 ⁽¹⁾	LAD9V2	550
	LC1D40A to D65A ⁽¹⁾	LAD4CM	1120
	LC1D80 and D95 (for AC control voltage)	LA9D4002	2445
	LC1D80 and D95 (for DC control voltage) ⁽²⁾	LA9D8002	3645
	LC1D115 and D150 ⁽²⁾	LA9D11502	3695

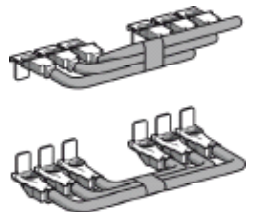
(1) With this set of busbars, any one contactor can be supplied directly by its EverLink® double cage power terminal block. The other two contactors are supplied by the busbar set. The 115A limitation is therefore applied to these two contactors.

(2) With electrical interlock



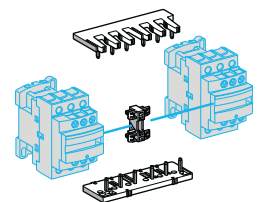
GV3S

Description	For use with	Reference	Unit LP [₹]
Power Connection for Reversing			
Kit Comprising : 1. A set of parallel bars 2. A set of reverser bars.	LC1D09 to D38	LAD9V5 + LAD9V6	1025
	LC1D40A to D80A	LA9D65A69	2375
	LC1D80 and D95 (for AC control voltage)	LA9D8069	5085
	LC1D80 and D95 (for DC control voltage)	LA9D8069	5085
	LC1D115 and D150	LA9D11569	8460



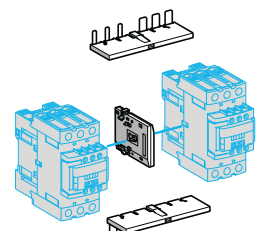
LA9 D8069

Description	For use with	Reference	Unit LP [₹]
Reversing Kit			
Kit Comprising : 1. A mechanical interlock LAD 9V2 with electrical interlocking LAD 9V1 2. A set of power connections LAD 9V5 (parallel) and LAD 9V6 (reversing).	LC1D09 to D38	LAD9R1V	1140
	LC1D09 to D38	LAD9R1	905
Kit Comprising : 1. A mechanical interlock LAD 4CM 2. A set of power connections LA9 D65A69.	LC1D40A to D80A	LAD9R3	2715



LAD9R1

Description	For use with	Reference	Unit LP [₹]
Star Delta Kit			
Time delay contact block LAD S2 (LC1D09...D80),	LC1D09 and D12	LAD91217	4290
Power circuit connections (LC1D09...D80),	LC1D18 to D32	LAD93217	5515
Hardware required for fixing the contactors onto the mounting plate (LC1D80)	LC1D40A and D50A	LAD9SD3	11145
	LC1D80	LA9D8017	12375



LAD9R3



LAD91217



LAD9SD3



LA9D8017

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

NORMAL STOCK ITEMS

W.E.F. January 27, 2020

Description	Time Delay Range	Timer Type	Reference	Unit LP [₹]
On delay timer ^{(1) (2)}	15...30 s	On delay	LA4DT2U	3315
On delay timer ^{(1) (2)}	0.1...2 s	On delay	LA4DT0U	
On delay timer ^{(1) (2)}	25...500 s	On delay	LA4DT4U	
Relay interface module - 24V DC ^{(1) (2)}	-	-	LA4DFB	3055

(1) For LC1 D09...38A (3P, AC coils only) add mounting adaptor LAD4BB and for LC1 D40A...65A (3P, AC coils only), add mounting adaptor LAD4BB3.
 (2) For LC1D80...150 (3P), direct mounting, for 100-250V AC Coils only.

Mounting Location	For Use With Contactor	Reference	Unit LP [₹]
For D Model Mechanical Latch Blocks			
Front, Clip-on	LC1D09...D38 (a or c) LC1DT20...DT40 (a or c) LC1D40A...D65A (3P a or c) LC1DT60A and DT80A (4P a or c)	LAD6K10*	3990
	LC1D80...D150 (3P a) LC1D80 and D115 (3 P c) LC1D80 (4 P a) LC1D80 and D115 (4 P a) LP1D80 and LC1D115 (4 P c)	LA6DK20*	4165

* Reference to be completed by adding coil voltage code

Note: For ordering Mechanical Latch Block with other coil voltages, please add ₹ 190/- to the unit price of the standard reference

*Coil Voltage Code

VOLTAGE (AC/DC)	24	42/48	110/127	220/240	380/415
Code	B	E	F	M	Q

Spare coils D Model

Product Compatibility	Reference	Unit LP [₹]
AC Coils		
CAD, LC1-D09...D38, DT20..40	LXD1*	920
LC1D40A, D50A, D65A & LC1DT60A, DT80A	LXD3*	2480
D80 & D95 (3P & 4P)	LX1D6*	2990
LC1-D115,D150	LX1D8*	5055
DC Coils		
LC1-D80-D95	LX4D7**	7780
LC1-D115, D150	LX4D8**	8555

Note: For ordering coils with other voltages and frequencies, please add ₹ 190/- to the unit price of the respective standard coil.

* Reference to be completed by adding coil voltage code

Coil Voltage Code

TYPE	VOLTAGE (V)	24	110	220	415
AC*	CAD, LC1-D09...D38, DT20..40, LC1 - D150, LC1D40A, D50A, D65A & LC1DT60A, DT80A, LC1D150 LC1D80, D95, D115	B7	F7	M7	N7

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

NORMAL STOCK ITEMS

W.E.F. January 27, 2020

Accessories - D Model

Description	For use with	Contacts	Reference	Unit LP [₹]	
Add On Blocks					
Additional instantaneous auxiliary contact blocks	LC1D09 ...LC1D150 & LC1F*	Front Mounted	1NO + 1NC	LADN11	370
			2NO	LADN20 <input checked="" type="checkbox"/>	
			2NC	LADN02	465
			2NO + 2NC	LADN22 <input checked="" type="checkbox"/>	665
			4NC	LADN04	770
			4NO	LADN40 <input checked="" type="checkbox"/>	665
	1NO + 3NC	LADN13			
	3NO + 1NC	LADN31 <input checked="" type="checkbox"/>	255		
LC1D80..LC1D95 & LC1F	Front Mounted	1NO		LADN10	
		1NC	LADN01		

Description	Contacts	Reference	Unit LP [₹]	
Add On Blocks				
Additional instantaneous auxiliary contact blocks	Side Mounted ⁽¹⁾	1NO + 1NC 2NO	LAD8N11 LAD8N20	1120
Pneumatic timer blocks front mounted	ON delay	1NO + 1NC 0.1..3s	LADT0	2655
		1NO + 1NC 0.1..30s	LADT2	
		1NO + 1NC 10..180s	LADT4	
		1NO + 1NC 1..30s ⁽²⁾	LADS2 <input checked="" type="checkbox"/>	2830
	OFF delay	1NO + 1NC 0.1 ..3s	LADR0	2655
		1NO + 1NC 0.1 ..30s	LADR2 <input checked="" type="checkbox"/>	
Set of shins to be used with 4 pole contactors		1NO + 1NC 10..180s	LADR4	1080
			LA9D511	

(1) Suitable for mounting on D Model range AC Coil Contactors and Control Relays only

(2) With Switching time of 40 ms between opening of the NC contact and closing of the NO contact recommended for Star - Delta Starters

Accessories compatibility

Contactors		Instantaneous auxiliary contacts						Time delay Front mounted
Type	Number of poles and size	Side mounted	Front mounted					
			1 contact	2 contact	4 contacts			
AC & AC/DC	3P	LC1D09...D38	1 on LH side	and	-	1	or 1	or 1
		LC1D40A...D80A	1 on LH or 1 on RH side	and	-	1	or 1	or 1
		LC1D80 and D95A (50/60 Hz)	1 on each side	or	2	and 1	or 1	or 1
		LC1D80 and D95A (50 or 60 Hz)	1 on each side	and	2	and 2	or 1	or 1
		LC1D115 and D150	1 on LH side	and	-	1	or 1	or 1
	4P	LC1DT20...DT40	1 on LH side	and	-	1	or 1	or 1
		LC1DT60A and DT80A	1 on LH or 1 on RH side	and	-	1	or 1	or 1
		LC1D40008, D65008 and D80	1 on each side	or	1	or 1	or 1	or 1
		LC1D115	1 on each side	and	1	or 1	or 1	or 1
		LC1D09...D38	-	-	-	1	or 1	or 1
DC	3P	LC1D40A...D80A	-	-	-	1	or 1	or 1
		LC1D80 and D95	-	-	1	or 1	or 1	or 1
		LC1D115 and D150	1 on LH side	and	-	1	or 1	or 1
	4P	LC1DT20...DT40	-	-	-	1	or 1	or 1
		LC1DT60A and DT80A	-	-	-	1	or 1	or 1
		LC1D40008, D65008 and D80	-	-	2	and 1	or 1	or 1
		LC1D115	1 on each side	-	-	and 1	or 1	or 1
LC (3)	3P	LC1D09...D38	-	-	-	1	-	-
	4P	LC1DT20...DT40	-	-	-	1	-	-

(3) LC : Low consumption

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

NORMAL STOCK ITEMS

W.E.F. January 27, 2020

Accessories for TeSys D

Description	For Use With	Reference	Unit LP [₹]
For Contactor D115/150			
Arc chamber - 3P	LC1D115	LA5D11550	4960
Arc chamber - 3P	LC1D150	LA5D15050	
Contacts set - 3P	LC1D115	LA5D1158031	13070
Contacts set - 3P	LC1D150	LA5D150803	13555
Contacts set - 4P	LC1D1150046	LA5D115804	18025

Product Compatibility	Fixing	Control Circuit Voltage	Suppressor Type	Reference	Unit LP [₹]
Coil Suppressor Modules					
LC1D12...D25 (4P)	Clip-on	24...48V AC	RC Circuit AC	LA4DA1E	1020
LC1D12...D25 (4P)		110...240V AC	RC Circuit AC	LA4DA1U	
LC1D12 & D25 (4P)		12...250V DC	Diode DC	LA4DC1U	
LC1D12...D25 (4P)		24...48V AC/DC	Varistor AC/DC	LA4DE1E	
-		110...250V AC/DC	Varistor AC/DC	LA4DE1U	
LC1D09...D38, LC2D09...D38, LC1DT20...DT40, LC2DT20...DT40 (3P)		24...48V AC	Varistor AC/DC	LAD4VE	985
		24...48V AC 400Hz	RC Circuit AC	LAD4RCE	
CAD		50...127V AC 200Hz	RC Circuit AC	LAD4RCG	895
		110...240V AC 100Hz	RC Circuit AC	LAD4RCU <input checked="" type="checkbox"/>	
		110...250V AC	Varistor AC/DC	LAD4VU	
LC1D80, LC1D95, LC2D80, LC2D95 (3P) LC2D80 (4P), LC1D40008, LC1D65008	Screw	24...250V DC	Diode DC	LA4DC3U	1020
LC1D80...D115, LC2D80...D115 (3P) LC1D80...D115, LC2D80...D115 (4P)		24...48V AC	Varistor AC/DC	LA4DE2E	975
		110...250V AC	Varistor AC/DC	LA4DE2U	
		24...48V AC 400Hz	RC Circuit AC	LA4DA2E	
		50...127V AC 200Hz	RC Circuit AC	LA4DA2G	1540
		110...240V AC 100Hz	RC Circuit AC	LA4DA2U	1020
		380...415V AC 150Hz	RC Circuit AC	LA4DA2N	1540
		24...48V DC	Varistor AC/DC	LA4DE3E	1020
		110...250V DC	Varistor AC/DC	LA4DE3U	975

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

NORMAL STOCK ITEMS

W.E.F. January 27, 2020

TeSys D

Modular marking system simplifies identification of standard contactors in the control panel to enhance visibility of the safety chain

Simple, customisable modular marking system

Standard TeSys D contactors

Easy-to-attach covers:



Auxiliary blocks for more contact points:



Flexibility to customise contactors included in the safety chain during panel building



Simpler and faster maintenance with 100% visibility



Safety covers and auxiliary blocks prevent screwdriver contact with poles

Standard TeSys U motor starters

Translucent labels to identify safety-chain devices:



Complete safety-chain identification system

TeSys D range

Retrofit contactor safety covers



LAD9ET1S
9A upto 65A



LAD9ET3S
80A to 95A



LAD9ET4S
110A to 150A



LADN22S
2NO + 2NC

Also available for CAD32/CAD50

TeSys U range

Retrofit identification label



LU9ET1S

Built in Safety

TeSys U motor starters are certified according to IEC 60947-4-1 for safety applications thanks to integrated mirror contact

Description	For Use with	Reference	Unit LP (₹)
Red cover (for safety chain indication)	LC1D09...D80A and DT20...DT80A	LAD9ET1S	525
	LC1D80 and D95	LAD9ET3S	
	LC1D115 and D150	LAD9ET4S	
Auxiliary Contact Block With red front face - for safety chain indication	2NO + 2NC	LADN22S	755

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

NORMAL STOCK ITEMS

W.E.F. January 27, 2020

A perfect fit for power switching



TeSys F 1250 to 2600A

Designed for demanding power switching applications. The complete, robust TeSys™ F range keeps pace with demanding AC-1 applications in wind power, solar and more.

- Optimised size for reduced panel space
- Proven reliability & high electrical durability
- Wide operating temperature range: up to 60 deg C
- Type 1 & 2 Co-ordination with Masterpact™ ACB
- Shared accessories with entire TeSys F range
- Drawer-mounted coils allow easy maintenance



Introducing the specially designed LC1SF1200* Contactor for solar PV applications

Power Contactors - F Model (3 Pole AC/DC Control)



- Conformity to International Standards – IEC, UL, CSA, CE
- High electrical life
- Type 2 Co-ordination Charts available
- Common accessories as Model D
- Rating : 115 - 2600A, AC/DC Coils, special Hoisting application coils
- Shock Proof version and Magnetic latching contactor available

[le] Rated Operational Current AC-1	Motor Power (Long Life) AC-3		Reference	Unit LP [₹]
	KW	HP		
200	59	80	LC1F115	17755
250	80	110	LC1F150	24610
275	100	135	LC1F185	29960
315	110	150	LC1F225	32635
350	140	190	LC1F265	39590
400	180	245	LC1F330	49220
500	220	300	LC1F400	54035
700	280	380	LC1F500	77575
1000	375	500	LC1F630	124120
1000	450	610	LC1F800	192600
1250	630	840	LC1F1000	333840

Note:

- Contactor reference does not include coil. Contactor coil & aux. contacts to be ordered separately.(Coil includes 1NO contact)
- Please select coils from table on next page (Page-30).

Power Contactors - F Model (2 Pole & 4 Pole AC/DC Control)



- Conformity to International Standards – IEC, UL, CSA
- 2 and 4 pole versions available
- 240-1600A in AC-1 duty, AC/DC coils
- Common accessories same as Model D
- High electrical life

[le] Rated Operational Current AC-1	Power Pole Composition	Reference	Unit LP [₹]
200	4NO	LC1F1154	29680
250	4NO	LC1F1504	36040
275	4NO	LC1F1854	44520
315	4NO	LC1F2254	53210
350	4NO	LC1F2654	58830
400	4NO	LC1F3304	69535
500	2NO	LC1F4002	49290
500	4NO	LC1F4004	81090
700	2NO	LC1F5002	72080
700	4NO	LC1F5004	123310
1000	2NO	LC1F6302	121900
1000	4NO	LC1F6304	171720
1600	4NO	LC1F7804	365765

Note:

- Contactor reference does not include coil. Contactor coil & aux. contacts to be ordered separately.(Coil includes 1NO contact)
- Power terminals may be protected by the addition of shrouds, to be ordered separately.

3P AC/DC control for AC-1 applications

[le] Rated Operational Current AC-1	Reference	Unit LP [₹]
1250	LC1F1250	on Request
1700	LC1F1700	
2100	LC1F2100 ⁽¹⁾	
2600	LC1F2600 ⁽²⁾	

(1) With set of right-angled connectors LA9 F2100

(2) With set of right-angled connectors LA9 F2600

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

Coils F Model

Product compatibility	AC Coil Reference	Unit LP [₹]	DC Coil Reference ⁽²⁾	Unit LP [₹]
LC1F115, LC1F150	LX9FF*	3495	LX4FF**	7395
LC1F185, LC1F225	LX9FG*	4840	LX4FG**	9845
LC1F265, LC1F330	LX1FH*	6020	LX4FH**	11985
LC1F400	LX1FJ*	12400	LX4FJ**	18975
LC1F500	LX1FK*	14750	LX4FK**	19585
LC1F630	LX1FL*	16500	LX4FL**	20300
LC1F780	LX1FX* ⁽³⁾	40755	LX4FX** ⁽³⁾	25000
LC1F800	⁽¹⁾	-	LX4F8**	28920
LC1F1000, LC1F1700, LC1F2100	LX1FK* ⁽³⁾	14750		
LC1F2600	LX1FL* ⁽³⁾	16500		

Please replace (*) with the Corresponding Control Voltage.

(1) Use rectifier with required DC coil (Ref: DR5TE4U)

(2) Coil with suppressor fitted as standard.

(3) Set of two coils to be connected in series.

Coil Voltage Code

Type	Voltage (V)	24	110	220	415
AC*	LC1F115-F225, LC1F400-630	-	110	220	415
	LC1F265, LC1F330	-	1102	2202	3802
	LC1F1000	-	55	110	220
DC**	LC1F1700, 2100, 2600	-	65	110	220
	LC1F115-LC1F330	24	110	220	-
	LC1F400-LC1F780	-	110	220	-
	LC1F800	-	FW	MW	-

Note: For ordering coils with other voltages and frequencies, please add ₹ 190/- to the unit Price of the respective standard coil.

Accessories - D and F Model

Description	For use with	Contacts	Reference	Unit LP [₹]	
Add on Blocks					
Additional instantaneous auxiliary contact blocks	LC1D09...LC1D150 & LC1F	Front Mounted	1NO + 1NC	LADN11	370
			2NO	LADN20	
			2NC	LADN02	465
			2NO + 2NC	LADN22	
			4NC	LADN04	770
			4NO	LADN40	
	LC1D80...LC1D95* & LC1F		1NO + 3NC	LADN13	665
			3NO + 1NC	LADN31	
			1NO	LADN10	255
			1NC	LADN01	

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

NORMAL STOCK ITEMS

W.E.F. January 27, 2020

Accessories - D and F Model

Description	Contacts	Reference	Unit LP [₹]	
Add On Blocks				
Additional instantaneous auxiliary contact blocks	Side	1NO + 1NC	LAD8N11	
	Mounted ⁽¹⁾	2NO	LAD8N20	
Pneumatic timer blocks front mounted	ON delay	1NO + 1NC 0.1..3s	LADT0	
		1NO + 1NC 0.1..30s	LADT2	
		1NO + 1NC 10..180s	LADT4	
	OFF delay	1NO + 1NC 1..30s ⁽²⁾	LADS2 <input checked="" type="checkbox"/>	2830
		1NO + 1NC 0.1 ..30s	LADR0	2655
		1NO + 1NC 0.1 ..30s	LADR2 <input checked="" type="checkbox"/>	
1NO + 1NC 10..180s	LADR4			

(1) Suitable for mounting on D Model range AC Coil Contactors and Control Relays only

(2) With Switching time of 40 ms between opening of the NC contact and closing of the NO contact recommended for Star - Delta Starters

* Suitable for 80A, 95A & Model F contactors only

For Use With Contactor	Reference	Unit LP [₹]
Mechanical Interlocks ⁽¹⁾ - Horizontally Mounted		
LC1F115, LC1F150, LC1F1154, LC1F1504	LA9FF970	3650
LC1F185, LC1F1854, LC1F225, LC1F2254	LA9FG970	4215
LC1F265, LC1F330, LC1F400, LC1F500, LC1F2654, LC1F3304, LC1F4004, LC1F5004	LA9FJ970	4720
LC1F630, LC1F6304, LC1F800	LA9FL970	5255

(1) For assembly of 3/4 pole 2 contactors of identical rating. To obtain electrical interlocking, please order 2 contact blocks LADN11

All power connections are to be made by the user.

Main Contact Sets*

LC1F115, LC1F150	LA5FF431 <input checked="" type="checkbox"/>	19330
LC1F185, LC1F225	LA5FG431	27925
LC1F265	LA5FH431	36780
LC1F330, LC1F400	LA5F400803	44595
LC1F500	LA5F500803	57365
LC1F630	LA5F630803	91245
LC1F800	LA5F800803	114580

* For 3 Pole contactor (per pole: 2 fixed contacts and 1 moving contact, 2 deflectors, 1 backplate, fixing screws & washers.)

Description	For use with	110V Reference	220V Reference	Unit LP [₹]
Suppressor Blocks				
suppressor module clip on	All AC ratings	LA4FRFCF	LA4FRCP	4915
suppressor bracket	For all LA4F	LA9D09981		515

Product compatibility	110V Reference	220/230V Reference	415/440V Reference	Unit LP [₹]
-----------------------	----------------	--------------------	--------------------	-------------

Hoisting Applications - AC Coils

LC1F265				
LC1F330	LX9FH1102	LX9FH2202	-	On request
LC1F400	LX9FJ925	LX9FJ931	LX9FJ937	On request
LC1F500	LX9FK925	LX9FK931	LX9FK937	On request
LC1F630	LX9FL924	LX9FL931	LX9FL936	On request

Note: Rectifier is a must with the coil. Ref no. DR5TE4U for 110..230V & DR5TE4S* for 415..440V, needs to be added extra with coil.

Product compatibility	48V Reference	110V Reference	220V Reference	440/460 V Reference	Unit LP [₹]
-----------------------	---------------	----------------	----------------	---------------------	-------------

Hoisting Applications - DC Coils

LC1F400	LX9FJ918	LX9FJ926	LX9FJ932	LX9FJ938	On request
LC1F500	LX9FK918	LX9FK926	LX9FK932	LX9FK938	On request
LC1F630	LX9FL918	LX9FL926	LX9FL931	LX9FL937	On request

Note:

- Resistor is a must with every coil as per the quantity mentioned.
- Economy Resistor to be selected from below table as per coil voltage code**

Contactor	110V Reference	220V Reference	440/460V Reference	Unit LP [₹]
-----------	----------------	----------------	--------------------	-------------

Economy Resistor

- To be used with hoisting application DC coil

LC1F400	1 X DR2SC0047	1 X DR2SC1200	1 X DR2SC4700	On request
LC1F500	1 X DR2SC0039	1 X DR2SC1000	1 X DR2SC3300	On request
LC1F630	2 X DR2SC0047	2 X DR2SC0047	2 X DR2SC3900	On request

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

NORMAL STOCK ITEMS

W.E.F. January 27, 2020

TeSys Special Purpose Contactor

Capacitor Duty Contactor



Nominal Reactive Power 440V	Auxiliary Contacts	Reference	Unit MRP [₹]
LC1-D•K - with Damping Resistors & Block of Early Make poles			
12.5 KVAR	1NO + 2NC	LC1DFK*	2935
16.7 KVAR	1NO + 2NC	LC1DGK*	4120
20 KVAR	1NO + 2NC	LC1DLK*	4630
25 KVAR	1NO + 2NC	LC1DMK*	5080
33.3 KVAR	1 NO + 2NC	LC1DPK*	11060
40 KVAR	1NO + 2NC	LC1DTK*	15240
60 KVAR	1NO + 2NC	LC1DWK12*	17155

#Contactor recommended upto 6 steps. For over 6 steps it is recommended to use chokes

* Reference to be completed by adding coil voltage code

* Coil Voltage Code

VOLTAGE	110	220
LC1DFK....DWK, 50/60Hz	F7	M7

Note: For ordering contactors with other coil voltages & frequencies, please add ₹ 190/- to the unit price of the standard contactor of the same rating.



Instruction Manual
Video for Capacitor
Duty Contactors



Guide for the Design
and Production of LV
Power Factor
Correction Cubicles

For complete information on selection of capacitor switching please refer to the TeSys catalogue

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

NORMAL STOCK ITEMS

W.E.F. January 27, 2020

TeSys Special Purpose Contactor

TeSys LC1 FG 3-pole Shockproof Contactors



In an environment subject to severe mechanical shocks, unwanted closing of a contactor's poles and the serious consequences of this, is not permissible. Shockproof contactors LC1 FG150 to FG630 are equipped with an auxiliary electromechanical device which ensures that the contactor is mechanically locked in the "open" position when its main electromagnet is not energised.

If the contactor is subjected to mechanical impact, from back to front or from front to back, accidental closing of the poles is then impossible. In addition, accidental opening of the poles (when the contactor is in the "on" position), is virtually impossible due to the significant pull-in force characteristic of these contactors.

- Marine: on-board equipment, windlasses, capstans, winches, etc...
- Military equipment : land, sea, launching silos.
- Heavy mechanical handling systems: travelling cranes, cranes, gantries.
- Conveying and handling: lifts, hoists, conveyors.
- Equipment for power stations.
- Distribution boards.

Vacuum Contactors (3 Pole AC Control)

[Ie] Rated Operational Current		Motor Power		Auxiliary Contacts	Reference	Unit LP [₹]
AC-1	AC-3	kW	HP			
160	160	75	100	2NO + 1NC	LC1V160*	114720
320	320	160	213	1NO + 1NC	LC1V320*	154050
630	610	300	400	1NO + 1NC	LC1V610*	276305

* Coil Voltage Code

VOLTAGE	110-120	220-240	380-415	440-480	550-600
Code	FE7	P7	V7	R7	X7

Note: Accessories for Vacuum Contactors available on request, please contact our Sales Office.

Bar contactors



General Purpose offer

LC1B Range for standard applications

- From 750A to 1800A AC-3
- From 800A to 2750A AC-1

CR1B Magnetic latching contactors - 1000V

- From 750A to 1800A AC-3
- From 800A to 2750A AC-1

Special range of configurable bar contactors for Photovoltaic applications

- CV3BJ, for voltages between 1000 and 1500V DC
 - Complete range of configurable bar contactors CV1*, CV3*
- Special purpose offers for induction furnaces, DC excitation circuits of synchronous motors etc.

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

NORMAL STOCK ITEMS

W.E.F. January 27, 2020

TeSys H - Ultra-compact starters

The most compact 3 KW / 400 V starter in the world



Up to 75 % of space reduction

- Ultra-compact 22.5 mm starter
- Reversing starter in the same width
- Maximum space savings for group starter architecture

Long electrical durability

- Suitable for high demanding application
- 30 000 000 of AC53a electrical cycles

> With printed QR code, referring directly to the product data sheet.

Easy Design

- Wide range setting motor protection
- Automatic, manual or remote reset after thermal trip
- Wide range of control voltage

Easy to integrate

- Direct mounting installation on DIN rail
- Control terminals on the upper side
- Power terminal on the lower side

TeSys H - Ultra-compact starters

Standard version



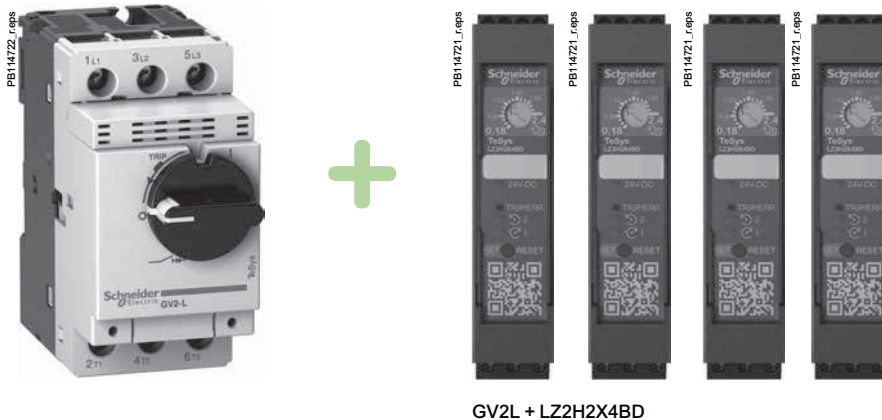
- **2 ratings:**
 - 2.4A 400V AC-53a
 - 6.5A 400V AC-53a
- **control voltages:**
 - 24V DC
 - 110V / 230V AC
- **2 terminal types:**
 - Screw clamps
 - Spring
- **Can provide up to 3 functions:**
 - Forward running
 - Reverse running
 - Overload protection

Standard Starter Tesys H

Motor Power @ 415V AC	Current range	Screw terminals	Unit LP [₹]	Spring terminals	Unit LP [₹]
kW					
1 way (DOL)					
0.75	0.18...2.4A	LZ1H2X4**	On Request	LZ1H2X43**	On Request
3	1.5...6.5A	LZ1H6X5**	On Request	LZ1H6X53**	On Request
2 ways (RDOL)					
0.75	0.18...2.4A	LZ2H2X4**	On Request	LZ2H2X43**	On Request
3	1.5...6.5A	LZ2H6X5**	On Request	LZ2H6X53**	On Request

** reference to be completed with the control code : BD (24V DC) or FU (110-230V AC)

Selection Chart for TeSys H



GV2L + LZ2H2X4BD



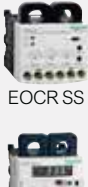



Selection of the circuit breaker Type 1 Co-ordination according to IEC/EN 60947-4-2

Max A	Iq kA	Number of TeSys H		Reference Circuit breaker	
		2.4 A	6.5 A	Rotary	Rocker
0.4	50.0	1	–	GV2L03	GV2LE03
0.63	50.0	1	–	GV2L04	GV2LE04
1	50.0	1	1	GV2L05	GV2LE05
1.6	50.0	1	1	GV2L06	GV2LE06
2.5	35.0	1	1	GV2L07	GV2LE07
4	12.5	1	1	GV2L08	GV2LE08
6.3	8.0	2	1	GV2L10	GV2LE10
10	7.0	4	1	GV2L14	GV2LE14
14	5.0	5	2	GV2L16	GV2LE16
18	4.0	7	2	GV2L20	GV2LE20
25	4.0	10	3	GV2L22	GV2LE22
32	3.0	13	4	GV2L32	GV2LE32

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

TeSys Protection Range

TeSys has the most rugged and reliable solution to manage motors
Please find a quick range overview below

Protection	TeSys Motor Control and Protection Solution						
	GV2P, GV4P GV3P, GV2ME	GV4PEM	Thermal Overload Relays	Overtorque Relays	TeSys U	EOCR	TeSys
	 GV2P GV3P GV2ME	 GV4PEM	 LR2K LRD LR9D LR9F	 EOCR SS EOCR SSD	 TeSys U	 EOCR	 TeSys T TeSys Island
Short circuit							
Causes of overheating							
• Slight overload							
• Locked rotor							
• Ventilation fault							With probes
• Abnormal temperature rise							With probes
• Shaft bearing seizure							
• Insulation fault							
• Long starting time		Adjustable					Adjustable
• Severe duty							
• Voltage variation							
Causes of phase variation							
• Phase reversal			LR9D only				
• Phase losses							
• Phase imbalance							
• Earth fault	GV4P only						
Mechanical shocks							
Historic fault, prealarming							
			Possible Pre-alarm				

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

NORMAL STOCK ITEMS

W.E.F. January 27, 2020

Overload relays for Motor Safety

New TeSys LR9D electronic overload relays
provide motor safety tailored to your needs



Thermal Overload Relays - K Model (Direct Mounting)



- Conformance to IEC, UL, CSA, CE
- Range : 0.1A to 16A
- Direct & Independent mounting
- Trip class 10A

Thermal Protection Adjustment Range	For Use With	Reference*	Unit LP [₹]
0.11...0.16		LR2K0301	1735
0.16...0.23		LR2K0302	
0.23...0.36		LR2K0303	
0.36...0.54		LR2K0304	
0.54...0.8		LR2K0305	
0.8...1.2		LR2K0306	
1.2...1.8	LC1K, LP1K, LP4K,	LR2K0307	
1.8...2.6	LP2K, LC2K	LR2K0308	
2.6...3.7		LR2K0310	
3.7...5.5		LR2K0312	
5.5...8		LR2K0314	
8...11.5		LR2K0316	
10...14		LR2K0321	
12...16		LR2K0322	

* Note: Terminal Block for Clip-on Mounting LA7K0064

Electronic Overload Relay - D Model



- Conformance to IEC, UL, CSA
- Range : 0.1A to 32A
- 5:1 Adjustment range
- High Operating Temperature
- Field selectable tripping class : 5,10, 20 & 30
- Type 1 & Type 2 Co-ordination chart available

Current Range	For Use With	Reference*	Unit MRP [₹]
0.1....0.5		LR9D01	7920
0.4....2.0	LC1D09 - 38A	LR9D02	8130
1.6....8.0	Direct Mounting	LR9D08	
6.4....32		LR9D32	9095

Note: For LR9D01 to LR9D32 - Terminal Block for Clip on Mounting LAD7B205.

Thermal Overload Relays - D Model



- Conformance to IEC, UL, CSA
- Range : 0.1A to 104A
- Higher operating temperature
- Tripping class 10A & 20 available
- Direct mounting on contactor is possible upto 95A

Thermal Protection Adjustment Range	For Use With	Reference*	Unit MRP [₹]
LRD Model (Direct Mounting)			
0.1...0.16		LRD01	1745
0.16...0.25		LRD02	
0.25...0.4		LRD03	
0.4...0.63		LRD04	
0.63...1		LRD05 ✓	
1...1.6	GV2L03, LE03,	LRD06 ✓	
1.6...2.5	LC1D09...LC1D38	LRD07 ✓	
2.5...4		LRD08 ✓	
4...6		LRD10 ✓	
5.5...8		LRD12 ✓	
7...10		LRD14 ✓	1960
9...13		LRD16 ✓	
12...18		LRD21 ✓	2020
16...24	GV2L22, LC1D25...D38	LRD22 ✓	
23...32	LC1D25...LC1D38, LC1D32	LRD32 ✓	3240
30...38	LC1D32, LC1D38	LRD35	
23...32	LC1D40A...D65A	LRD332	3585
30...40	LC1D80...LC1D95	LRD3353	
30...40	LC1D40A...D65A	LRD340	
30...40	LC1D80...LC1D95	LRD3355	
37...50	LC1D40A...D65A	LRD350 ✓	4920
	LC1D80...LC1D95	LRD3357	5885
48...65	LC1D40A...D65A	LRD365	6315
62...80	LC1D80A	LRD380	6580
48...65	LC1D80...LC1D95	LRD3359	6315
63...80	LC1D80...LC1D95	LRD3363	6850
80...104	LC1D80, LC1D95	LRD3365	8455

Electronic Overload Relay - F Model



- Conformity to International Standards - IEC, UL, CSA
- Direct mounting on contactors is possible upto 630A
- Higher operating temperature
- Tripping class 10

Thermal Protection Adjustment Range	Reference	Unit LP [₹]
LR9-F Electronic Protection Relays		
30...50	LR9F5357	11000
48...80	LR9F5363	
60...100	LR9F5367	
90...150	LR9F5369 ✓	11235
132...220	LR9F5371	13160
200...330	LR9F7375	14125
300...500	LR9F7379	17335
380...630	LR9F7381	18405

Note:

- For LRD01...LRD35 - Terminal Block for clip-on Mounting LAD7B106
- For LRD33** - Terminal Block for clip-on Mounting LA7D3064 ✓
- For LRD332, LRD340, LRD350 & LRD365 - Connection block for separate mounting LAD96560
- The LRD relays can be used for AC or DC current up to 104A
- For long starting, Class 20 relays are available on request.
- Device for remote tripping and electrical reset is available on request.

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

✓ NORMAL STOCK ITEMS

W.E.F. January 27, 2020

Advanced Motor Protection

High performance protection
for your application



EOLR Electronic Overload Relay

- Precise Overload Protection
- Wide operating Range 5:1
- Higher Operating Temperature
- Selectable Trip Class



EOCR Electronic Over Current Relay

- Compact and Robust
- Advanced current protections
- Suitable for 1-phase and 3-phase applications
- Suitable for motors upto 400A
- Pass-through CT for electrical isolation

EOLR - LR9D

Electronic Overload Relay



- Conformance to IEC, UL, CSA
- Range : 0.1A to 32A
- 5:1 Adjustment range
- High Operating Temperature
- Field selectable tripping class : 5, 10, 20 & 30
- Type 1 & Type 2 Co-ordination chart available

Current Range	For Use With	Reference*	Unit MRP [₹]
0.1...0.5		LR9D01	7920
0.4...2.0	LC1D09 - 38A	LR9D02	8130
1.6...8.0	Direct Mounting	LR9D08	8130
6.4...32		LR9D32	9095

Note: For LR9D01 to LR9D32 - Terminal Block for Clip on Mounting LAD7B205.

Protection Relay Selection table

Features\product	EOLR	EOCR		
	LR9D	SS/SSD	3DM2/FDM2	3MZ2/FMZ2/3BZ2/FBZ2
Precise Overload Protection (Inverse Time)				
Over Current Protection (Definite Time)				
Selectable Trip Clas 5-30				
Current Unbalance Protection				
Locked Rotor, Phase Loss		*		
Under current Protection				
Ground Current Protection				
Current Measurement	3CT	2CT	3CT	3CT
Current Display		#		
Direct Mounting on Contactor	\$			
Fault History				
Configurable protection functions				

* - over current based protection
- with SSD
\$ - upto 38 Amps

■ Possible solution
■ Ideal solution

Analog EOCR

- Compact
- Protection against over current/phase loss/locked rotor (phase loss/locked rotor operates by over current)
- Manual (instant)/electrical reset
- NVR (No Volt Release) function / Fail Safe
- Suitable for single-phase / 3-phase motors
- LED (operation display and active current display)

EOCR SS

- Without Display



EOCR SS			
Current Range	Control Voltage	Reference	Unit MRP [₹]
0.5-6	24-240V AC/DC	EOCRSS-05S	4675
0.5-6	380-440V AC	EOCRSS-05W	
3-30	24-240V AC/DC	EOCRSS-30S	
3-30	380-440V AC	EOCRSS-30W	
5-60	24-240V AC/DC	EOCRSS-60S	
5-60	380-440V AC	EOCRSS-60W	

Note: 2 SPST output contacts

To order an EOCR-SS:

E 0 C R S S - 0 5 S
① ②

①	Current Setting Range	5 0.5-6A	For 60A or higher, combine 05Type and an external CT (secondary 5A) for use
		30 3.0-30A	
		60 5.0-60A	
②	Operating Power Supply	S 24-240V AC/DC	
		W 380-440V AC	

Note: For a CT combination type, please write an accessory code from the CT Order Codes separately.

EOCR SSD

- With Display (Operating Current & Trip Cause)



EOCR SSD			
Current Range	Control Voltage	Reference	Unit MRP [₹]
0.5-6	24-240V AC/DC	EOCRSSD-05S	6750
0.5-6	380-440V AC	EOCRSSD-05W	
3-30	24-240V AC/DC	EOCRSSD-30S	
3-30	380-440V AC	EOCRSSD-30W	
10-60	24-240V AC/DC	EOCRSSD-60S	
10-60	380-440V AC	EOCRSSD-60W	

Note: 2 SPST output contacts

To order an EOCR-SSD:

E 0 C R S S D - 0 5 S
① ②

①	Current Setting Range	5 0.5-6A	For 60A or higher, combine 05Type and an external CT (secondary 5A) for use
		30 3.0-30A	
		60 5.0-60A	
②	Operating Power Supply	S 24-240V AC/DC	
		W 380-440V AC	

Note: For a CT combination type, please write an accessory code from the CT Order Codes separately.

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

☑ NORMAL STOCK ITEMS

W.E.F. January 27, 2020

NEW Digital EOCR



- Micro-controller unit based
- Real time processing / High precision
- Protections : Over current, Under current, Phase loss, Phase reversal, Stall, Jam, Current Imbalance, Earth fault (3MZ2/FMZ2/3BZ2/FBZ2)
- Current Rating – 0.5 to 400A
- Bar graph indication of a load current to the current setting.
- Ancillary functions : Fail safe, Accumulated running hour, 3 faults records & limitation of auto-restart.
- Individual phase I-THD monitoring
- Suitable low Frequency Operation
- Communication capable RS485 (Optional)

Selection Table for Digital EOCR

3 D M 2 - W R D U W Z

1 2 3 4 5 6

1	Digital Electronic Over-current Relay	3DM2/ FDM2	Without Ground Fault Protection	
		3MZ2/ FMZ2	With Ground Fault Protection with External ZCT	
		3BZ2/ FBZ2	With Ground Fault Protection inbuilt ZCT	
Built-in display 3●●2		Flush mounting display F●●2		
No	Item	Type	Current Range	
2	Standard	WR	0.5...80A	
3	Relay Output	D	b (95-96), a(97-98), a(07-08) 3DM2, FDM2	
		A	a(97-98): OL, a(57-58): GF	
		C	b(95-96), a(97-98): OL/GF	
		D	b(95-96) : OL, a(57-58): GF*	
4	Control Power	B	AC/DC 24V	
		U	AC/DC 100~240V	
5	Wiring Method	W	Window-hole type*	
		H	Bottom-hole type	
6	Version	Z	New version	

* Not Possible with 3BZ2/FBZ2

Digital EOCR				
Current Control Range	Control Voltage	Reference	Description	Unit MRP [₹]
0.5-80A	100-240V AC/DC	3DM2-WRDUWZ	Without ground - fault protection	14750
		3DM2-WRDUHZ		
		FDM2-WRDUWZ	15950	
		FDM2-WRDUHZ		
		3MZ2-WRAUWZ	14950	
		3MZ2-WRAUHZ		
		3MZ2-WRCUWZ		
		3MZ2-WRCUHZ		
		3MZ2-WRDUWZ		
		3MZ2-WRDUHZ		
		3MZ2-WRAUWZ	17950	
		3MZ2-WRAUHZ		
		3MZ2-WRCUWZ		
		3MZ2-WRCUHZ		
		3MZ2-WRDUWZ	21700	
		3MZ2-WRDUHZ		
3BZ2-WRAUHZ	22050			
3BZ2-WRCUHZ				
FBZ2-WRAUHZ				
FBZ2-WRCUHZ				

EOCR Accessories

ZCT - Ground Fault Protection

Reference	Description	Unit LP [₹]
ZCT-035-Z	ZCT EP 35 mm	4785
ZCT-080-Z	ZCT EP 80 mm	6985
ZCT-120-Z	ZCT EP 120 mm	11495

Display Cable for FDM2/FMZ2/FBZ2

Reference	Description	Unit LP [₹]
CABLE-RJ45-001Q	CABLE 1M	1705
CABLE-RJ45-003Q	CABLE 3M	1815

Current Transformer

3CT - H1 - 100 - C

1

Reference	Description	Unit LP [₹]
H1-100-Z	Square 3CT 100:5	3750
HH-150-Z	Square 3CT 150:5	4650
H2-200-Z	Square 3CT 200:5	4950
H3-300-Z	Square 3CT 300:5	5395
H4-400-Z	Square 3CT 400:5	6350

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

☑ NORMAL STOCK ITEMS

W.E.F. January 27, 2020

Introducing New TeSys GV4

Circuit breaker for Motor protection



New TeSys GV4

- Compact and Robust, covering motors upto 55kW- Breaking capacity upto 100kA
- Available with magnetic, electronic thermal magnetic and advanced protection functions including alarming, jam, long start etc
- Equipped with patented EverLink power connections for the entire range, ensuring 100% reliable connections
- Type 2 Co-ordination with TeSys range of contactors, including TeSys T motor controllers

Circuit Breakers for Motor Protection

Magnetic Circuit Breaker



- Conformance to IEC 60947 -1,-2,-4
- Magnetic circuit breakers range from 0.1-80 Amps
- High Breaking capacity up to 100kA
- Wide range of accessories

Breaking Capacity at 415V 50Hz	Motor Power AC-3**		Magnetic Protection Rating (A)	Reference	Unit LP [₹]
	kW	HP			

With Rocker Lever Control (Economy)*

100kA	0.09	-	0.4	GV2LE03	3640
	0.18	-	0.63	GV2LE04	
	0.37	0.5	1	GV2LE05	
	0.55	-	1.6	GV2LE06	
	1.1	1.5	2.5	GV2LE07	
	1.5	2	4	GV2LE08	
	2.2	3	6.3	GV2LE10	
	3	5.5	10	GV2LE14	
15kA	5.5	7.5	14	GV2LE16	4225
	7.5	10	18	GV2LE20	
	11	15	25	GV2LE22	
10kA	15	20	32	GV2LE32	7170

With Rotary Handle Control*

100kA	0.09	-	0.4	GV2L03	4175
	0.18	-	0.63	GV2L04	
	0.37	0.5	1	GV2L05	
	0.55	-	1.6	GV2L06	
	1.1	1.5	2.5	GV2L07	
	1.1	2	4	GV2L08	
	2.2	3	6.3	GV2L10	
	4	5.5	10	GV2L14	
50kA	5.5	7.5	14	GV2L16	11770
	7.5	10	18	GV2L20	
	11	15	25	GV2L22	
	15	20	32	GV2L32	
	18.5	24.79	40	GV3L40	
	22	29.48	50	GV3L50	
	30	40.2	65	GV3L65	
37	49.58	73	GV3L73	13910	

With Protection toggle control

50kA	37	49.58	80	GV4LE80N	12500
	55	73.7	115	GV4LE115N	
	75	100.5	150	LV430832	
	110	147.4	220	LV431752	
	160	214.4	320	LV432749	
	200	268	500	LV432949	

* Conforming to IEC 60947-2-3-4

** 50/60Hz - 415V

• GV2-L with the D Model contactor and LRD overload relay provides Type 2 Co-ordination

** 50/60Hz - 415V

(1) With GV1-L3 current limiter, breaking capacity can be increased to 100kA.

Combination of the GV2-M with the D Model provides Type 2 Co-ordination.

(2) With GV1-L3 current limiter, breaking capacity can be increased to 100kA.

Combination of the GV2-P with the D Model provides Type 2 Co-ordination.

Thermal Magnetic Circuit Breaker



- Conformance to IEC 60947 -1,-2,-4, conformity to International Standards - UL, CSA, CE
- Thermal magnetic circuit breakers range from 0.1-220 Amps
- High Breaking capacity up to 100kA
- Wide range of accessories
- S-shaped busbar for side-by-side connection with 40 - 65A Contactor

Breaking Capacity at 415V 50Hz	Motor Power AC-3**		Thermal Protection Adjustment Range	Reference	Unit MRP [₹]
	kW	HP			

With Push button Control (Economy)

100kA	-	-	0.1 - 0.16	GV2ME01	3690
	0.06	-	0.16 - 0.25	GV2ME02	
	0.09	-	0.25 - 0.40	GV2ME03	
	0.18	-	0.40 - 0.63	GV2ME04	
	0.37	0.5	0.63 - 1.0	GV2ME05	
	0.55	0.75	1.0 - 1.6	GV2ME06	
	0.75	1	1.6 - 2.5	GV2ME07	
	1.1	2	2.5 - 4	GV2ME08	
15kA ⁽¹⁾	2.2	3	4 - 6.3	GV2ME10	4150
	3	5.5	6 - 10	GV2ME14	
	5.5	7.5	9 - 14	GV2ME16	
	7.5	10	13 - 18	GV2ME20	
	9	12.5	17 - 23	GV2ME21	
	11	15	20 - 25	GV2ME22	
	15	20	24 - 32	GV2ME32	
10kA ⁽¹⁾	15	20	24 - 32	GV2ME32	8665

With Rotary Handle Control

100kA	-	-	0.1 - 0.16	GV2P01	3800
	0.06	-	0.16 - 0.25	GV2P02	
	0.09	-	0.25 - 0.40	GV2P03	
	0.18	-	0.40 - 0.63	GV2P04	
	0.37	0.5	0.63 - 1.0	GV2P05	
	0.55	0.75	1.0 - 1.6	GV2P06	
	0.75	1	1.6 - 2.5	GV2P07	
	1.1	2	2.5 - 4	GV2P08	
50kA ⁽²⁾	2.2	3	4 - 6.3	GV2P10	4495
	3	5.5	6 - 10	GV2P14	
	5.5	7.5	9 - 14	GV2P16	
	7.5	10	13 - 18	GV2P20	
	9	12.5	17 - 23	GV2P21	
	11	15	20 - 25	GV2P22	
	15	20	24 - 32	GV2P32	
35kA ⁽²⁾	15	20	24 - 32	GV2P32	11450
50kA	18.5	24.79	30...40	GV3P40	13375
	22	29.48	37...50	GV3P50	16585
	30	40.2	48...65	GV3P65	17015
	37	49.58	62...73	GV3P73	17390
	50kA	37	49.58	40...80	GV4PE80N
50kA	55	73.7	65...115	GV4PE115N	16500

With Protection toggle control

50kA	37	49.58	40...80	GV4PE80N	16500
50kA	55	73.7	65...115	GV4PE115N	16500

With Direct Rotary Handle

70KA	75	101	70...150	GV5P150H	30000
	110	147	100...220	GV5P220H	35000
	160	214	160...320	GV6P320H	45000
	200	268	250...500	GV6P500H	62000

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

MCCB for Motor Protection

GV4LE



- IEC/EN 60947-1, IEC/EN 60947-2, CCC, EAC
- Can be used with class 5, 10 or 20 relay
- Short Circuit Protection with an adjustable pick-up $I_n = 6$ to 14 I_n .
- From 0.25 - 55kW

Magnetic Protection Toggle Control

Motor Power AC-3 (400/415V AC)		In (A)	Magnetic setting range A	25kA breaking capacity		50kA breaking capacity		100kA breaking capacity	
kW	HP			Reference	Unit LP [₹]	Reference	Unit LP [₹]	Reference	Unit LP [₹]
0.25..0.75	0.3..1	2	12..28	-	-	GV4LE02N6	-	GV4LE02S6	-
0.55..1.5	0.7..2	3.5	21..49	-	-	GV4LE03N6	-	GV4LE03S6	-
1.5..3	2..4	7	42..96	-	-	GV4LE07N6	-	GV4LE07S6	-
3..5.5	4..7.5	12.5	75..175	-	-	GV4LE12N6	-	GV4LE12S6	-
5.5..11	7.5..14	25	150..350	GV4LE25B6	12000	GV4LE25N6	12500	GV4LE25S6	15500
11..22	15..30	50	300..700	GV4LE50B6		GV4LE50N6		GV4LE50S6	
18.5..37	25..50	80	480..1120	GV4LE80B6		GV4LE80N6		GV4LE80S6	
30..55	40..75	115	690..1610	GV4LE115B6		GV4LE115N6		GV4LE115S6	

Note: For Everlink termination please order after removing the 6 at the end Eg. GV4LE115N

GV4PE



- IEC/EN 60947-1, IEC/EN 60947-2, IEC/EN 60947-4-1, UL 60497-4-1, CCC, EAC, CSA
- Overload or thermal protection
- Short time delay protection
- Short circuit protection
- Fixed Ground fault protection
- Phase unbalance or phase loss
- Front indications through LED
- Variable Trip class : Trip Class 10/ Trip Class 20

Thermal Magnetic Protection Toggle Control

Motor Power AC-3 (400/415V AC)		In (A)	Thermal setting range A	25kA breaking capacity		50kA breaking Capacity		100kA breaking Capacity	
kW	HP			Reference	Unit LP [₹]	Reference	Unit LP [₹]	Reference	Unit LP [₹]
0.25..0.75	0.3..1	2	0.8..2	-	-	GV4PE02N6	-	GV4PE02S6	-
0.55..1.5	0.7..2	3.5	1.4..3.5	-	-	GV4PE03N6	-	GV4PE03S6	-
1.5..3	2..4	7	2.9..7	-	-	GV4PE07N6	-	GV4PE07S6	-
3..5.5	4..7.5	12.5	5..12.5	-	-	GV4PE12N6	-	GV4PE12S6	-
5.5..11	7.5..14	25	10..25	GV4PE25B6	15000	GV4PE25N6	16500	GV4PE25S6	18500
11..22	15..30	50	20..50	GV4PE50B6		GV4PE50N6		GV4PE50S6	
18.5..37	25..50	80	40..80	GV4PE80B6		GV4PE80N6		GV4PE80S6	
30..55	40..75	115	65..115	GV4PE115B6		GV4PE115N6		GV4PE115S6	

Note: For Everlink version please order after removing the 6 at the end. Eg. GV4PE115N

Crimp Lug/busbar connection

Description	Sold in lots of	Reference
Crimped lug connector + screws	1	GV4LUG
Transparent terminal shield for crimped lug connector	1	LAD96590
Interphase barriers	6	LV426920
Spreader 3-pole	To increase the pitch to 35 min	1
		LV426940

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

NORMAL STOCK ITEMS

W.E.F. January 27, 2020

Accessories for GV4



MX Shunt Trip

- Trips the circuit breaker when the control voltage rises above 70% of rated voltage
- Shunt trip 110..130V AC is suitable.. etc for ground fault protection when combined with a Class I ground fault sensing element

MN Under Voltage Release

Trips the circuit breaker when the control voltage drops below 35% of its rated voltage

Description	Maximum Number	Mounting	Voltage	References	Unit LP [₹]
Mx Shunt Trip	1	Internal, Plug-In	24V AC 50/60Hz, 24V DC	GV4AS027	2280
			48V AC 50/60Hz, 48V DC	GV4AS057	
			110-130V AC 50/60Hz, 125V DC	GV4AS137	
			220-240V AC 50 Hz, 208-240V AC 60Hz, 277V AC 60Hz	GV4AS287	
			380-415V AC 50Hz, 440-480V AC 60Hz	GV4AS487	
Mn Undervoltage Release	1	Internal, Plug-In	24V AC 50/60Hz, 24V DC	GV4AU027	2980
			48V AC 50/60Hz, 48V DC	GV4AU057	
			110-130V AC 50/60Hz, 125V DC	GV4AU137	
			220-240V AC 50Hz, 208-240V AC 60Hz	GV4AU247	
			277V AC 60Hz	GV4AU286	
			380-415V AC 50Hz	GV4AU415	
			440-480V AC 60Hz	GV4AU486	

Auxiliary Contact Blocks



An auxiliary contact block provides one changeover contact with one common point for OF and SD function, depending on where it is inserted

Open/Close OF Function: indicates position of the circuit breaker contacts

Trip Alarm SD Function: indicates circuit breaker tripping due to:

- Electrical fault (overload, short circuit)
- Shunt trip/Undervoltage release
- "Push to Trip" Function

Resets when the circuit breaker is reset

Description	Maximum Number	Mounting	Type of Contacts	Reference	Unit LP [₹]
Auxiliary Contact Block	2 (1 Each For OF or SD)	Internal Plug-In	NO + NC	GV4AE11	800

Rotary Handles

Description	Type	Degree of Protection	Reference	Unit LP [₹]
Direct Mounting Rotary Handle	Black	IP40	GV4ADN01	1195
	Red Handle on Yellow Bezel	IP40	GV4ADN02	
Front Extended Rotary Handle (Min Shaft Length 214Mm/Max Shaft Length 627Mm)	Black	IP54	GV4APN01	1775
	Red Handle on Yellow Bezel	IP54	GV4APN02	
	Red Handle on Yellow Bezel	IP65	GV4APN04	
Side Rotary Handle (Left or Right)	Black	IP54	LV426935	2800
	Red Handle on Yellow Bezel	IP54	LV426936	2860

Connection Accessories

Description	Reference	Unit LP [₹]
Spreader 3-pole (To increase pitch to 35mm) (1 pce)	LV426940	600

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

NORMAL STOCK ITEMS

W.E.F. January 27, 2020

Accessories for Motor Circuit Breakers

Description	Reference	Unit LP [₹]	
For GV2			
Front contact NO or NC ⁽¹⁾	GVAE1	780	
Front contact NO + NC	GVAE11 <input checked="" type="checkbox"/>	950	
	GVAE20	1050	
Side contact NO + NC	GVAN11 <input checked="" type="checkbox"/>	1150	
	GVAN20		
Fault signalling contact + 1NO contact ⁽²⁾	GVAD1010 <input checked="" type="checkbox"/>	1500	
Fault signalling contact + 1NC contact ⁽²⁾	GVAD1001		
Short circuit signalling contact block 1 C/O	GVAM11	1430	
Under voltage trip	110 ... 115V 50Hz	GVAU115	2560
	220 ... 240V 50Hz	GVAU225	
	380 ... 400V 50Hz	GVAU385	
Shunt trip	110 ... 115V 50Hz	GVAS115	2740
	220 ... 240V 50Hz	GVAS225	
	380 ... 400V 50Hz	GVAS385	
Additive limiter for increasing breaking capacity to 100kA for GV2ME and GV2P.	GV1L3	4420	
connection block - GV2 with contactor LC1-D09..D38	GV2AF3	540	
Connection block - LS1 D32 or GV2 with Contactor LC1-K or LP1-K	GV2AF01	580	
Empty enclosure for GV2ME - plastic	GV2MP02	2035	
	GV2MC02	2240	

(1) Choice of NC or NO contact operation depending on which way round the reversible block is mounted.

(2) The GV-AD is always mounted next to the circuit breaker.

Busbars

Connection Pitch	No. of Tapoff Points	Reference	Unit LP [₹]
For GV2 Breakers			
45 mm	2	GV2G245	1200
	4	GV2G445	1895
54 mm	2	GV2G254	1370
	3	GV2G354	1540
	4	GV2G454	1930
72 mm	5	GV2G554	2090
	2	GV2G272	1640
	4	GV2G472	2360

Description	Reference	Unit LP [₹]
Accessories for Busbars		
Terminal block - to supply one or more 3-pole busbar GV2	GV2G05	2960
Protective end covers for unused busbar outlets	GV1G10	520
Terminal block for connection from top	GV1G09	1550

Accessories for Motor Circuit Breakers

Description	Reference	Unit LP [₹]
For GV2-P/GV2-L		
External operator - IP54, Black	GV2APN01 <input checked="" type="checkbox"/>	2750
External operator - IP54, Yellow/Red	GV2APN02	5060
Visible isolation block - for motor circuit breaker GV2	GV2AK00	2300
For GV3P/GV3L		
Auxiliary Contacts		
Front contact: 1 NO (fault) + 1NC (Auxiliary)	GVAED011	990
Front contact: 1 NO (fault) + 1NO (Auxiliary)	GVAED101	1090
Busbar		
3-pole, 3 tap, 64 mm pitch	GV3G364	1150
S-shape bus bar	GV3S	865
External Operator		
IP54, Black	GV3APN01	3280
IP54, Yellow/Red	GV3APN02	3150

Note: All other accessories are same as of GV2.

Busbars GV3G364 and GV3S are not compatible with GV3*73 and GV3*80.

Description	Operating Voltage	Reference	Unit LP [₹]
For GV7			
Accessory for direct rotary handle mount on door ⁽²⁾	-	GV7AP05	1860
Auxiliary contact - 1 OC	-	GV7AE11 <input checked="" type="checkbox"/>	1830
Clip-on connector - upto 150 A - 1.5..95 mm ²	-	GV7AC021	750
Clip-on connector- upto 220 A - 1.5..185 mm ²	-	GV7AC022	710
Fault discrimination Device	24...72V DC/ 24...48V AC	GV7AD111	5360
	110 ... 240V AC/ DC	GV7AD112	5360
Front rotary handle GV7AP GV7R - black handle ⁽²⁾	-	GV7AP03	3150
	-	GV7AP01	5480
Padlocking device - 1..3 padlocks Ø5..8mm shank ⁽³⁾	-	GV7V01	840
Phase barriers	-	GV7AC04	965
Terminal shields IP405 ⁽¹⁾	-	GV7AC01	1945
For GV7			
Shunt release	110...130V AC 50/60Hz	GV7AS107	4165
	200...240V AC 50/60Hz	GV7AS207	4165
	380...440V AC 50/60Hz	GV7AS387	4010
Under Voltage release	110...130V AC 50/60Hz	GV7AU107	4300
	200...240V AC 50/60Hz	GV7AU207	4300
	380...440V AC 50/60Hz	GV7AU387	4300
3-pole spreader - for Motor circuit breaker GV7 45 mm pitch		GV7AC03	1245

(1) Terminal shields cannot be used together with spreaders.

(2) For mounting direct rotary handle on enclosure door. This accessory makes it possible to open the door if the device is closed and prevents the device from being closed if the door is open.

(3) For Circuit breaker not fitted with a rotary handle

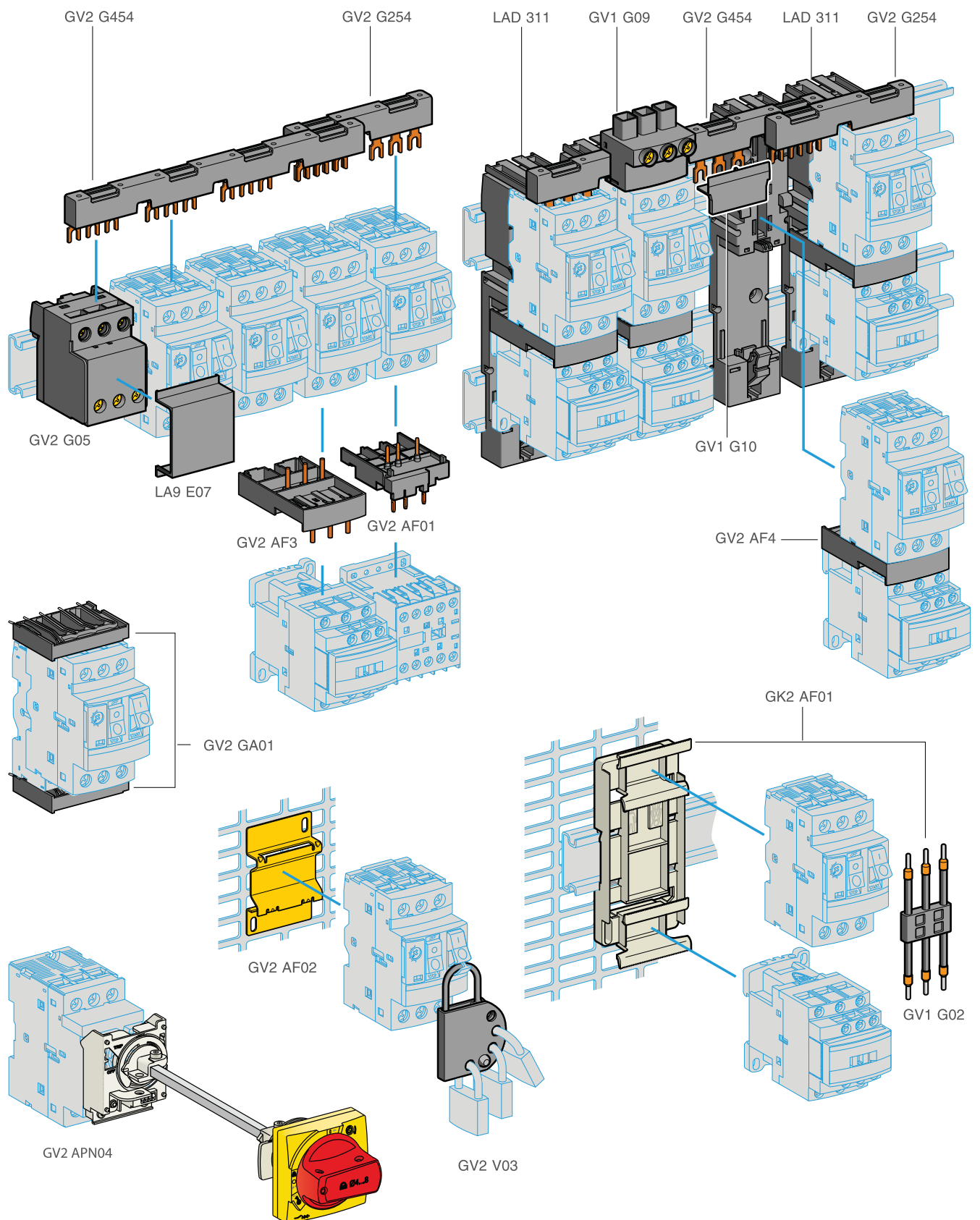
For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

NORMAL STOCK ITEMS

W.E.F. January 27, 2020

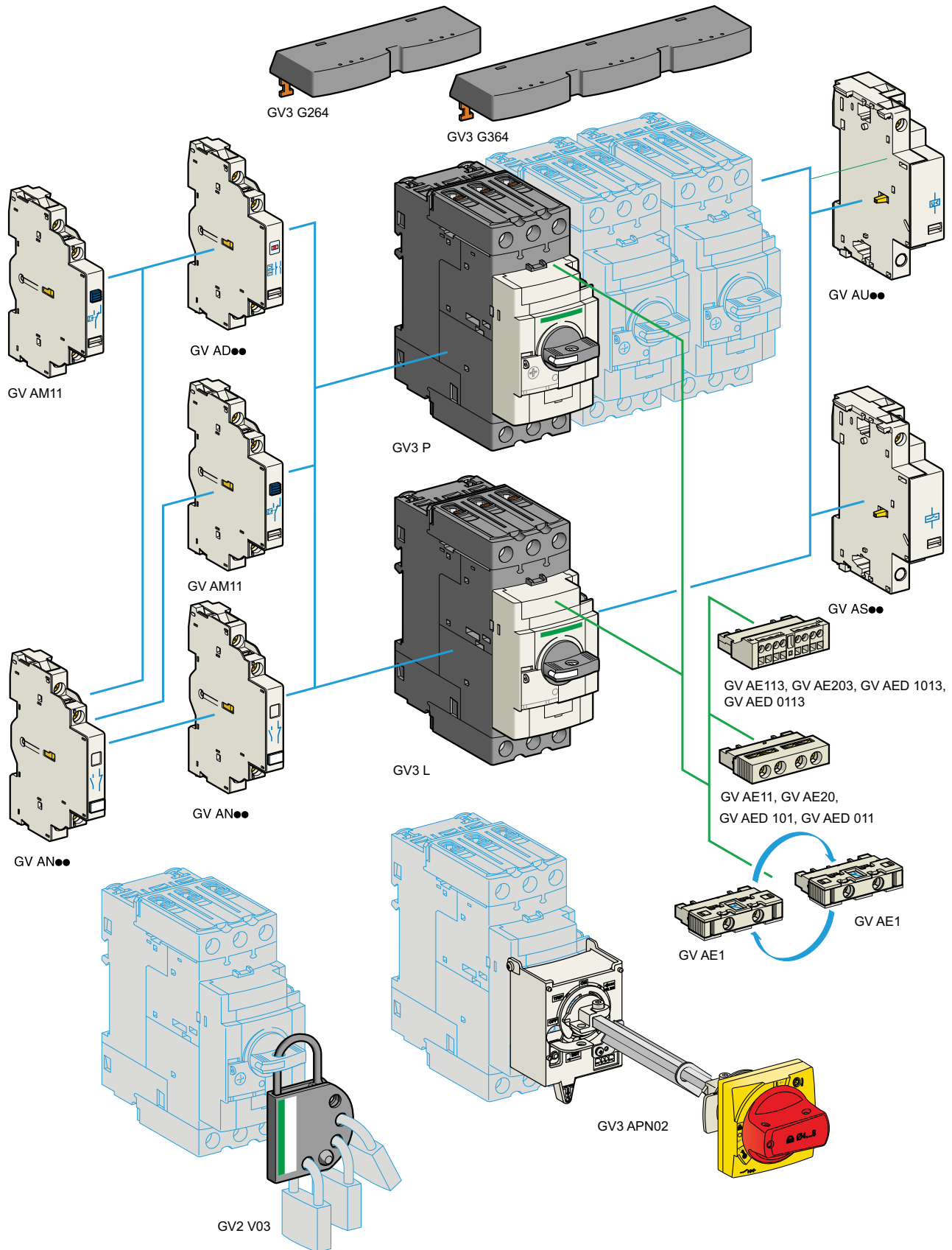
TeSys

Accessories compatibility

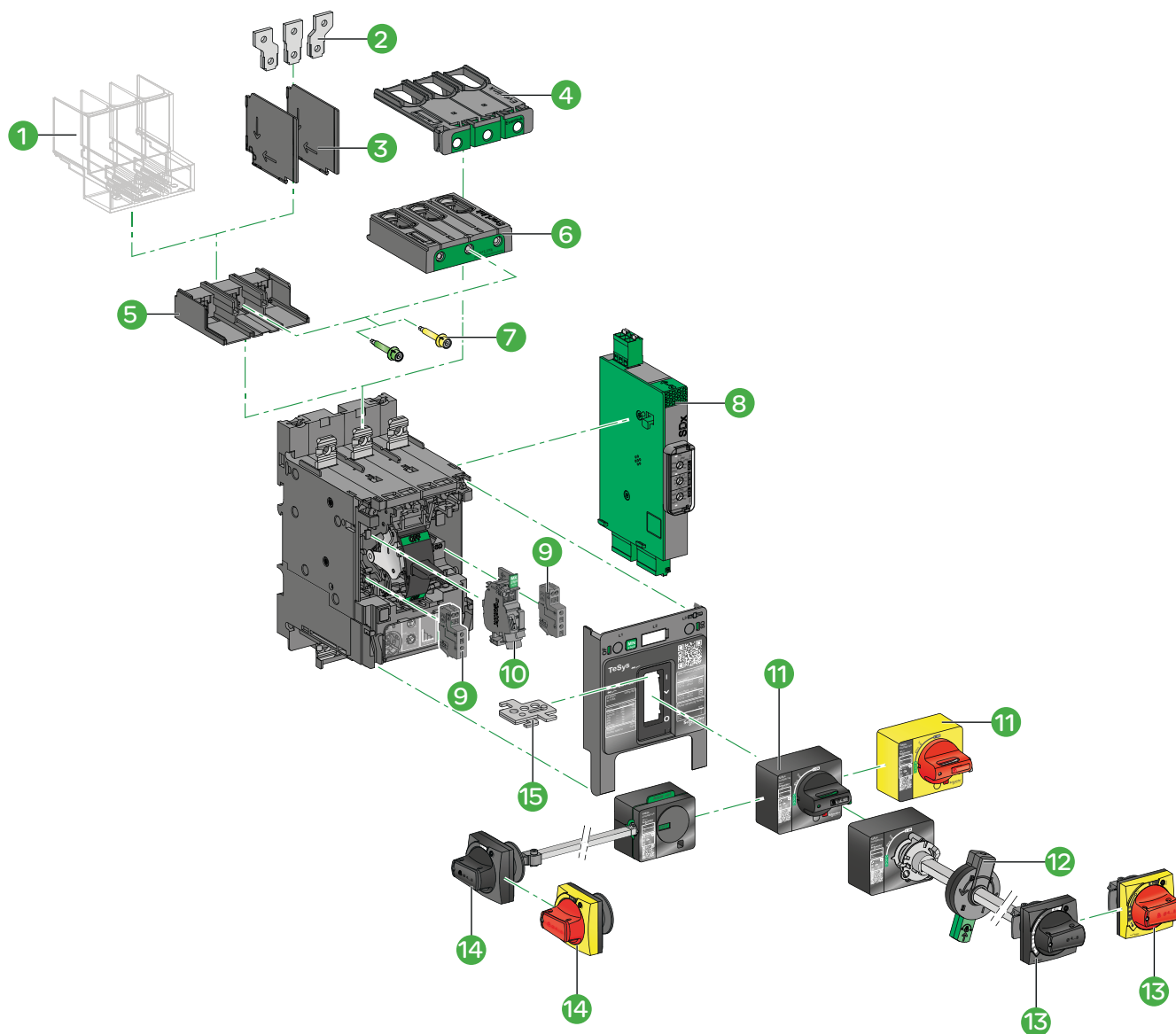


TeSys

Accessories compatibility



TeSys GV4 Overview



- 1 Long terminal shield LAD96590
- 2 Terminal spreaders LV426940
- 3 Interphases barriers LV426920
- 4 Large spacing cover for EverLink connector GV4G66
- 5 Crimp lug connector GV4LUG
- 6 EverLink® connector LAD96595
- 7 Torque limiting breakaway bits LV42699p
- 8 SDx alarming/fault differentiation module GV4ADM1111 (only with GV4PEM)
- 9 Auxiliary contact block for OF or SD function GV4AE11
- 10 - MN undervoltage release GV4AUpp
- MX shunt trip GV4ASpp
- 11 Direct mounting black or red on yellow bezel rotary handle GV4ADN01/ GV4ADN02
- 12 Open door shaft operator (for front extended rotary handle) LV426937
- 13 Front extended rotary handle kit with red handle on yellow bezel or black handle GV4APN01/ GV4APN02 /GV4APN04
- 14 Side rotary handle kit with red handle on yellow bezel or black handle LV426935/LV426936.
- 15 Toggle locking device 29370

Linergy

Linergy is tailored for your flexible panel needs
(changes right up to the last minute)

Because Linergy is:

Flexible



Safer



Reliable



Linergy BZ
Power Busbars

- > Quick connection plates for Compact and TeSys offers
- > Multi-standard offering up to 630 A

Linergy HK
"Hot Plug" Distribution

- > Panel easily upgradeable
- > Reliable "hot plug" modification or upgrade
- > Multi-standard system of up to 160 A

Linergy FT
Device Feeders

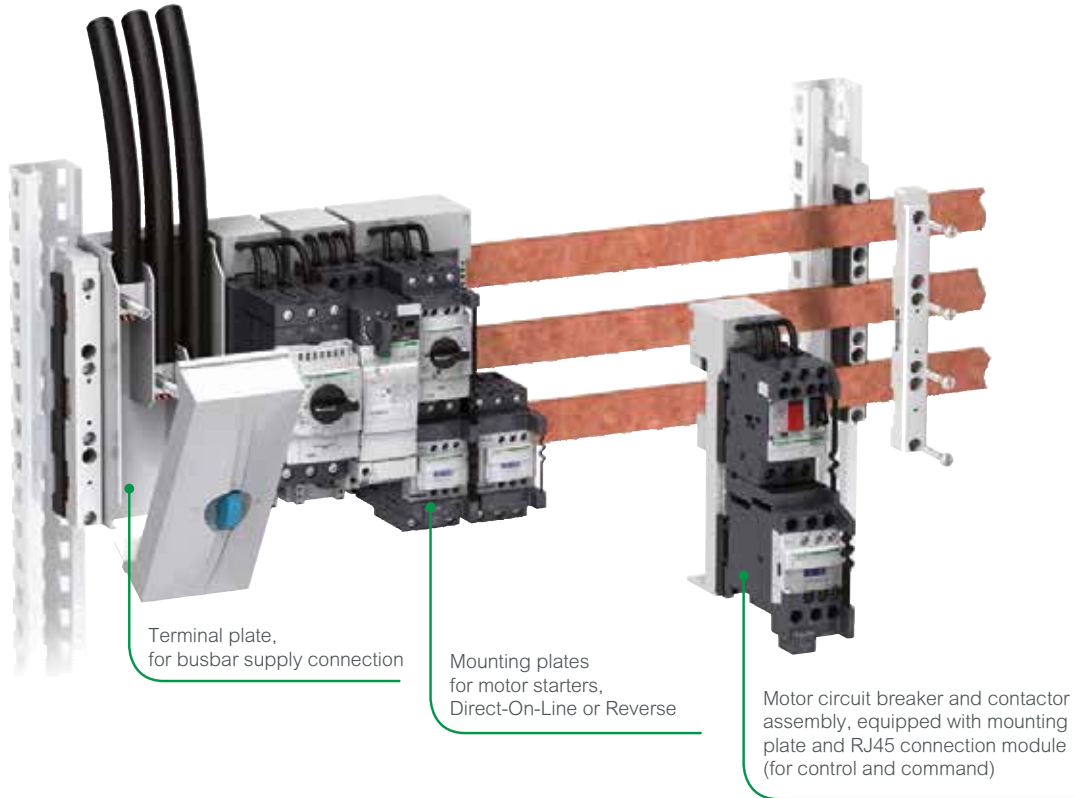
- > Optimised productivity and efficiency of your control panel
- > Easy to install
- > High reliability

- > Quick Installation
- > Multi Standard Offer
- > Intuitive Solution

Linergy BZ

Linergy BZ, Multistandard power busbar system,
Application: power distribution to motor starters

In control switchboards, when space saving, quick mounting and replacement are required



Advantages

- Considerable space saving: components are directly mounted on the busbar
- Large choice of mounting plates (for GV2, GV3 motor circuit breakers and assemblies, GV7, TeSys U)
- Quick connection, disconnection (power off): clip-on mounting plates
- Vibration resistant busbar connections: no periodical re-tightening required

Detailed view: back face of a motor starter mounting plate

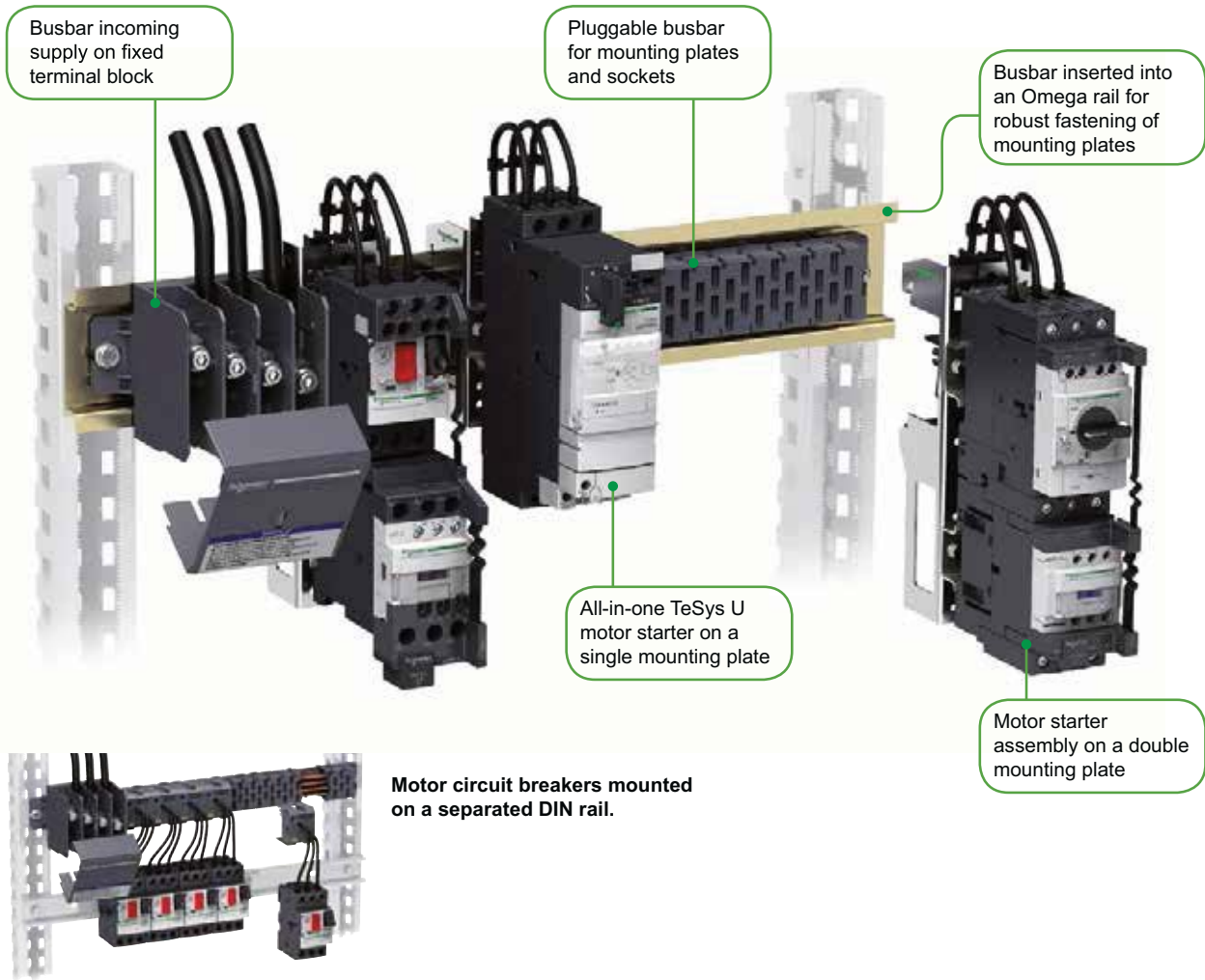
- A reliable electrical contact is ensured by copper blades
- The blue part locks the mounting plate on the busbar, compatibility is provided with standard profiles:
- Height 12, 15, 20, 25 or 30 mm,
- Width 5 or 10 mm



Lineryg HK

Lineryg HK, Multistandard hot-plug busbar system,
Application: electrical distribution to motor starters

When compactness and continuity of service are required



- ## Advantages
- Space saving in compact enclosures: the total volume is reduced to that of the motor starter assemblies
 - Preserved continuity of service during modification and maintenance: live connection, disconnection (off load)
 - Wide adaptability: 6 busbar lengths from 344 to 1100 mm, 12 models of sockets, 23 mounting plates for motor starters up to 25 or 50 A

Detailed view: mounting plate back face

- Thanks to the plug and its pre-cabled wires the motor starter is safely assembled in the workshop, for immediate or later use.
- A piece of DIN profile rail is attached on the front face of the mounting plate for fastening the components.
- The metal mounting plate ensures a rigid and robust fastening on the omega rail.



TeSys Switches

Vario Switch Disconnectors

[Ithe] Conventional Thermal Current**	Poles Description	Rated Operational Power (AC-23)*	Reference	Unit LP [₹]
--	----------------------	---	-----------	-------------

Complete Enclosed Switches

• Range 12 to 175A, IP 65 Sealable and Lockable

10	3P	4 KW	VCF02GE	2670
16	3P	5.5 KW	VCF01GE	2910
20	3P	7.5 KW	VCF0GE	3535
25	3P	11 KW	VCF1GE	3795
32	3P	15 KW	VCF2GE	4445
50	3P	22 KW	VCF3GE	6875
63	3P	30 KW	VCF4GE	8045

* Rated Power at 415V

** Ith in enclosure

For Switch Type (Amps)	Mounting Arrangement	Ingress	Reference	Unit LP [₹]
------------------------------	-------------------------	---------	-----------	-------------

Operators (Padlockable)

12 - 40	4 Screw Fixing	IP65	KCF1PZ	605
63 - 80	4 Screw Fixing	IP65	KCF2PZ	645
125 - 175	4 Screw Fixing	IP40	KCF3PZ	2630

Vario Switch Disconnectors

[Ith] Conventional Thermal Current	Poles Description	Reference	Unit LP [₹]
---------------------------------------	----------------------	-----------	-------------

Complete Switch with Padlockable Operator

• Suitable for Front Mounting or Base Mounting

12	3P	VCF02	1680
20	3P	VCF01	1825
25	3P	VCF0	2135
32	3P	VCF1	2235
40	3P	VCF2	2770
63	3P	VCF3	4510
80	3P	VCF4	4695
125	3P	VCF5	10760
175	3P	VCF6	13040

Switch Bodies

12	V02	1095
20	V01	1265
25	V0	1505
32	V1	1825
40	V2	2235
63	V3	3110
80	V4	4090
125	V5	8300
175	V6	10590

Accessories

Description	For Use with Switch Bodies	Rating in A	Pole Composition	Earth Contact	Auxiliary Contacts	Reference	Unit LP [₹]
-------------	-------------------------------	----------------	---------------------	------------------	-----------------------	-----------	-------------

Vario Add-on Modules ⁽¹⁾

Main Pole Module	V02/VCF02	12	1P	-	-	VZ02	780
	V01/VCF01	20	1P	-	-	VZ01	800
	V0/VCF0	25	1P	-	-	VZ0	850
	V1/VCF1	32	1P	-	-	VZ1	830
	V2/VCF2	40	1P	-	-	VZ2	890
	V3/VCF3	63	1P	-	-	VZ3	1155
Neutral Pole Module ⁽²⁾	V4/VCF4	80	1P	-	-	VZ4	1155
	V02 / VCF02 to V2 / VCF2	-	1N	-	-	VZ11	950
	V3 / VCF3 to V4 / VCF4	-	1N	-	-	VZ12	1275
Earthing Module	V5 / VCF5 to V6 / VCF6	-	1N	-	-	VZ13	2635
	V02 / VCF02 to V2 / VCF20	-	-	-	-	VZ14	940
	V3 / VCF3 to V4 / VCF4	-	-	1	-	VZ15	1110
Auxiliary Contact Block Module	V5 / VCF5 to V6 / VCF6	-	-	1	-	VZ16	1725
	V02/ VCF02 to V6 / VCF6	-	-	-	1NO + 1NC	VZ7	980
	V2/ VCF02 to V6 / VCF6	-	-	-	2NO	VZ20	980

(1) For mounting option of modules, please refer to the technical catalogue.

(2) With early make and late break contacts

Description	For Use With	Reference	Unit LP [₹]
-------------	--------------	-----------	-------------

Components for Door Interlocking

Shaft extension - for Mini-VARIO and VARIO - V02..V2	V02...V2	VZ17	940
		VZ30	1110
Shaft extension - for Mini-VARIO and VARIO - V3 V4 V5 V6	V3, V4, V5, V6	VZ18	1265
		VZ31	255
Door interlock plate	VZ17 / VZ30	KZ32	440
		KZ74	

Input Terminal Protection Shrouds

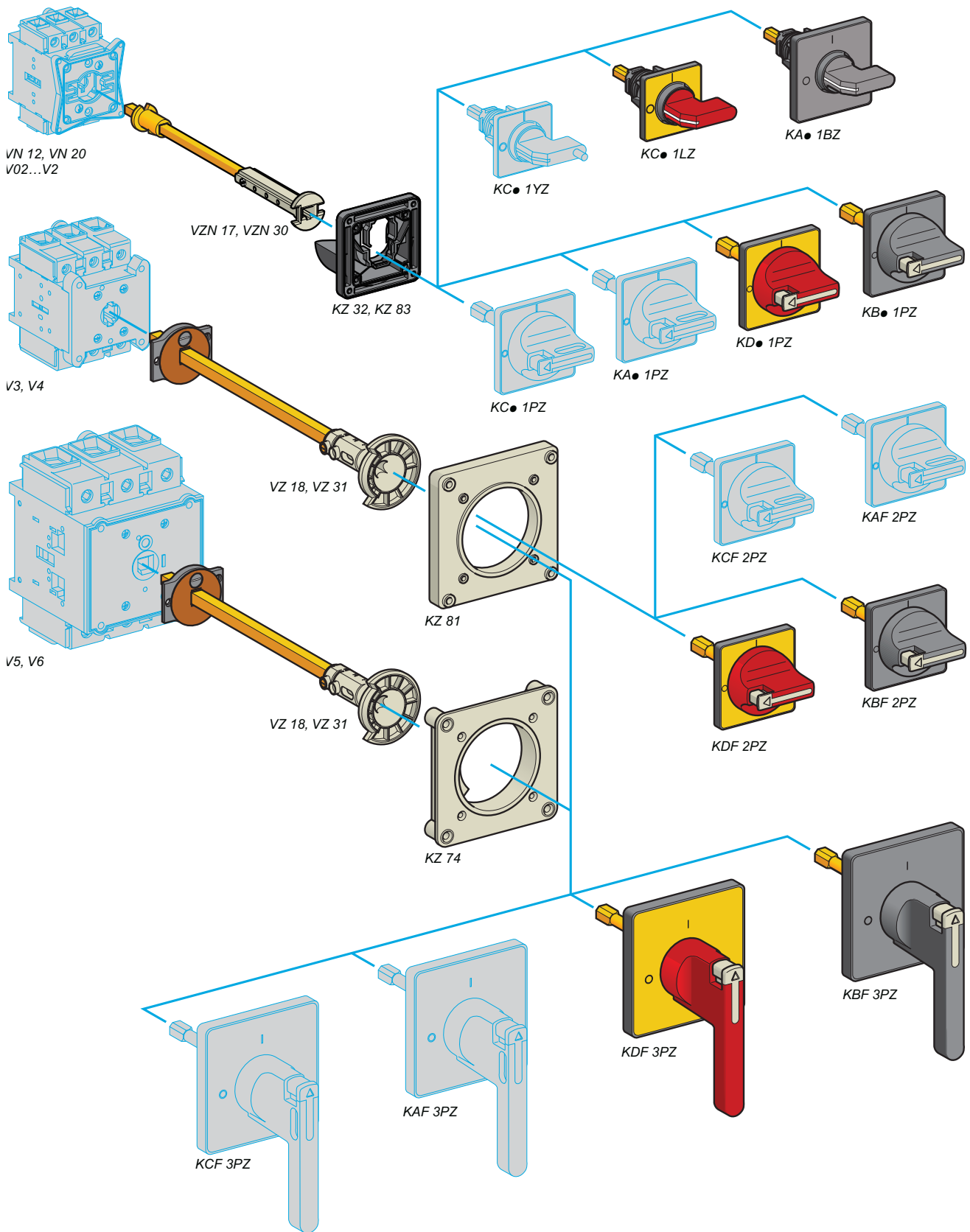
Terminal Shrouds	V02 - V2	VZ8	315
		VZ26	275
	V3 - V4	VZ9	335
		VZ27	275
	V5 - V6	VZ10	425
		VZ28	470
V02 - V6	VZ29	315	

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

NORMAL STOCK ITEMS

W.E.F. January 27, 2020

TeSys Switches Accessories



Let TeSys U build the solution for you!



TeSys U is an innovative “self-protected combination starter” providing motor disconnect, motor branch circuit protection, motor controller and motor overload protection in a single product.

- Total Co-ordination compliant to IEC 60947-6-2 and UL 508 Type E
- Modular and Scalable
- Compact starter 45 mm width



TeSys U: All in
one Motor
Starter Solution



se.com/in/TeSys

TeSys U - Make the Starter Smarter



- Total Coordinated Starter – 3 functions in a single device
- Compact Starter, DOL / RDOL upto 15kW (32A, AC-3) in 45mm width
- Direct connectivity to Modbus / Profibus / CANopen / DeviceNet /AS-i
- Higher switching life - 15Million operations, 2Million AC-43 electrical life
- Breaking capacity upto 130kA



Power Base

For assembling components, ON/OFF operation and resetting.
 > 2 power bases:
 upto 12A and upto 32A
 > Direct starter and reversing starter models.

Control Unit

Performs all the electrical protection functions to cover main applications from 0 to 32A.

Some of these also provide advanced measurement, alarm and display functions.

4 simple function modules

Thermal overload alarm Indication of motor load
 Thermal overload signalling and manual reset
 Thermal overloaded signalling and automatic or remote reset.

6 communication modules

AS-Interface
 Profibus DP
 CANopen
 DeviceNet
 Advantys STB
 Modbus.

40%

“TeSys solutions allow us to reduce the size of our enclosure”
 says a panel builder from the water treatment sector

60%

“Late customization means that we can build 60% of the panels, even though the project design has not yet been completed”
 says an engineer in a food processing industry

Quick Selection

Select 1	+	Select 1	Optional	or	Optional	or	Optional	Accessories																
Base Power Unit Non-Reversing LUB 120 0.. 12A with terminal 12 0.. 12A no terminal 120* 0.. 32A with terminal 32 0.. 32A no terminal 320* Reversing LUB2B 120 BL 0.. 12A with terminal 12 0.. 12A no terminal 120* 0.. 32A with terminal 32 0.. 32A no terminal 320* 24 V DC BL 24 V AC B 48...72 VAC or 48 VDC ES 110...240 VAC/DC FU <small>*prewired cables to be ordered separately</small>		Control Unit LUC B X6 BL Class 10, 3Ph B Class 10, 1Ph C Class 20, 3Ph D Multifunction M 0.15 to 0.6 A X6 0.35 to 1.4 A 1X 1.25 to 5 A 05 3 to 12 A 12 4.5 to 18 A 18 8 to 32 A 32 24V DC BL 24VAC B 48...72 VAC/48 VDC ES 110...24VAC/DC FU	Communication Module* LUC 033 Modbus Serial 033 Profibus DP 07 CANopen 08 DeviceNet 09 Advantys STB 15 ASI V2 ASILUFC51 Prewired Cables <table border="1"> <thead> <tr> <th>Description</th> <th>Reference</th> </tr> </thead> <tbody> <tr> <td>Prewired cable for non-reversing power base</td> <td>LU9BN11C or LU9BN11L</td> </tr> <tr> <td>Prewired cable for reversing power base</td> <td>LU9MRC or LU9MRL</td> </tr> </tbody> </table>	Description	Reference	Prewired cable for non-reversing power base	LU9BN11C or LU9BN11L	Prewired cable for reversing power base	LU9MRC or LU9MRL	or	Function Module LUF DH11 Fault diff. with manual reset DH11 Fault diff. with auto reset DA10 Thermal overload pre-alarm W10 Motor load indication (4-20mA) V2	or	Auxiliary Contacts Contactor auxiliary contacts LUFN 11 1NO + 1NC 11 2NC 02 2NO 20 Side contacts 2NO LUA8E20 Power auxiliary contacts (trip status) LUA1C 20 1NO + 1NC 11 2NO 20	Accessories <table border="1"> <thead> <tr> <th>Description</th> <th>Reference</th> </tr> </thead> <tbody> <tr> <td>Mounting kit Black handle, with error status IP54</td> <td>LUAPN21</td> </tr> <tr> <td>Mounting kit Red handle, with error status IP54</td> <td>LUAPN22</td> </tr> <tr> <td>Line spacer for UL508 Type E</td> <td>LU9SPO</td> </tr> <tr> <td>Current limiter 130kA@460V</td> <td>LUALB1</td> </tr> </tbody> </table>	Description	Reference	Mounting kit Black handle, with error status IP54	LUAPN21	Mounting kit Red handle, with error status IP54	LUAPN22	Line spacer for UL508 Type E	LU9SPO	Current limiter 130kA@460V	LUALB1
Description	Reference																							
Prewired cable for non-reversing power base	LU9BN11C or LU9BN11L																							
Prewired cable for reversing power base	LU9MRC or LU9MRL																							
Description	Reference																							
Mounting kit Black handle, with error status IP54	LUAPN21																							
Mounting kit Red handle, with error status IP54	LUAPN22																							
Line spacer for UL508 Type E	LU9SPO																							
Current limiter 130kA@460V	LUALB1																							

*Suitable with 24V DC starter variant only

Note: For prices please contact regional sales office or customer care centre

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

✓ NORMAL STOCK ITEMS

W.E.F. January 27, 2020

Wherever productivity is a concern, intelligence to Motor Control is the solution



TeSys T Intelligence system optimises the operational performance of LV motors through advanced protections and embedded intelligent functions inside intelligent Motor Control Centre (iMCC)



Discover
TeSys T



Tesys T Motor Management Systems

TeSys T covers all load monitoring and protection needs from feeders to critical process automation. The equipment is protected, while advanced diagnostics, statistics, and alarms help in anticipating unexpected production halts and minimize downtime. TeSys T is compact and a natural fit for control panels with IEC or NEMA standards. In addition, the system's connectivity and access to real-time data provides key information to enhance the operation and safety of the process while improving efficiency.

Tesys T Controller:

Intelligent motor controller for 1P/3P Motors with built in CT up to 100Amps with accurate monitoring and protection functions, 6DI, 4DO, 1CBCT input, 1 Temperature probe

Protection Functions:

- Thermal overload
- Phase imbalance and phase overloads
- Temperature monitoring via probes
- Phase reversal
- Ground fault detection
- Long start and Jam protection
- Load shedding
- Load fluctuations
- power factor monitoring

Monitoring Functions:

- Phase and average current
- Line to Line and average voltage
- Motor temperature, ground current
- Active and Reactive Energy
- Frequency & Power Factor
- Detailed Fault history
- Fault counts
- motor statistics

Control Functions:

- Local / Remote / HMI control
- Predefined programs for DOL, RDOL, Star-delta, two-speed starters

Communication:



Quick Selection

TeSys T Controller

Reference	
LTM R	100 E BD
Current Range	0.4 - 8 A 08
	1.35 - 27 A 27
	5 - 100 A 100
Network Protocol	CAN Open C
	DeviceNet D
	Ethernet IP / Modbus TCP/IP E
	Modbus M
	Profibus DP P
Control Voltage	24 V DC BD
	110-240V AC FM



TeSys T
Full and Flexible
Intelligent Motor
Management System

TeSys T Accessories

TeSys T Expansion Module ^{1,2}	
Control Voltage	Reference
24 V DC	LTM EV40BD
110V AC	LTM EV40FM

¹ Required for Voltage & Power measurement
² 4 digital inputs

Connector for Expansion	
Length (m)	Reference
0.04	LTMCC004 ³
0.3	LTM9CEXP03
1	LTM9CEXP10

³ Sold in lots of 6

Ground Fault CT's		
Primary [A]	Internal Ø "d" [mm]	Reference
65	30	50437
85	50	50438
160	80	50439
250	120	50440
400	200	50441
630	300	50442

Description	Composition	Reference
Programming software SoMove	1 Program for each PC	On request
PC connecting cable	USB to RS485 Converter	TCSMCNAM3M002P

Operator Control Display	
Description	Reference
Operator Control Display with configuration backup	LTM CUF

Controller to Display Cable	
Length (m)	Reference
1.0	LTM9CU10
3.0	LTM9CU30

Current Transformers ⁴		
Primary [A]	Secondary [A]	Reference
100	1	LT6 CT1001
200	1	LT6 CT2001
400	1	LT6 CT4001
800	1	LT6 CT8001

Note: For prices please contact regional sales office or customer care centre

TE Start - Lifeline of Motors



>> TDL



>> TSD/A



>> TRS

TE Start & TeSys Motor Starters

- Exhaustive Range of industrial starters consisting of DOL, Reversing, Automatic star delta starters
- Better aesthetic & Assured performance
- Test to trip facility
- Built in single phasing protection

DOL Starters



Motor Power HP	Thermal Protection Adjustment Range	Device Short Name	Reference	Unit MRP [₹]
----------------	-------------------------------------	-------------------	-----------	--------------

TDL, Automatic 1 Phase (0.17 - 3 HP)

0.17	1.1...1.6	5TDL	MS11AC04*	2745
0.33	2.5...4	5TDL	MS11AC06*	
0.5	4...6	5TDL	MS11AC07*	
1	5.5...8	5TDL	MS11AC09*	3065
1.5	9...13	10TDL	MS11AC10*	
2	12...18	10TDL	MS11AC11*	
3		10TDL	MS11AC13*	

TDL, Automatic 3 Phase (0.05 - 125 HP)

0.05	0.16...0.25	5TDL	MS13AC01*	2625
0.125	0.24...0.4	5TDL	MS13AC03*	
0.17	0.4...0.63	5TDL	MS13AC04*	
0.25	0.63...1	5TDL	MS13AC05*	
0.33		5TDL	MS13AC06*	
0.5	1...1.6	5TDL	MS13AC07*	2725
0.75		5TDL	MS13AC08*	
1	1.6...2.5	5TDL	MS13AC09* ✓	
1.5		5TDL	MS13AC10*	
2	2.5...4	5TDL	MS13AC11* ✓	
3	4...6	5TDL	MS13AC12* ✓	3045
5	5.5...8	5TDL	MS13AC14* ✓	
7.5	9...13	10TDL	MS13AC15* ✓	
10	12...18	10TDL	MS13AC16* ✓	
12.5		15TDL	MS13AC17*	
15	16...24	15TDL	MS13AC18* ✓	5140
17.5		20TDL	MS13AC19*	8370
20	23...32	20TDL	MS13AC20*	
25	30...40	30TDL	MS13AC21*	
30	37...50	30TDL	MS13AC22*	
40	48...65	40TDL	MS13AC24*	
50	63...80	50TDL	MS13AC26*	19815
75	84...135	75TDL	MS13AC28*	30585
100	124...198	100TDL	MS13AC29*	39395
125		125TDL	MS13AC30*	48560

TRS, Automatic Reversing 3 Phase (3 - 20 HP)

3	4...6	10TRS	MS13RJ12*	7465
5	5.5...8	10TRS	MS13RJ14*	
7.5	9...13	10TRS	MS13RJ15*	
10	12...18	10TRS	MS13RJ16*	12215
12.5		20TRS	MS13RJ17*	
15	16...24	20TRS	MS13RJ18*	
17.5		20TRS	MS13RJ19*	
20	23...32	20TRS	MS13RJ20*	

Star Delta Starters



Motor Power HP	Thermal Protection Adjustment Range	Device Short Name	Reference	Unit MRP [₹]
----------------	-------------------------------------	-------------------	-----------	--------------

TSD/A, Automatic 3 Phase (7.5 - 400 HP)

7.5	5.5...8	15TSDA	MS23AI15*	8900
10	7...10	15TSDA	MS23AI16* ✓	
12.5		15TSDA	MS23AI17*	9030
15	9...13	15TSDA	MS23AI18* ✓	
20	12...18	30TSDA	MS23AI20* ✓	10255
25	16...24	30TSDA	MS23AI21* ✓	11655
30		30TSDA	MS23AI22* ✓	13475
35	23...32	40TSDA	MS23AI23*	21610
40	30...38	40TSDA	MS23AI24*	23795
50		50TSDA	MS23AI26*	28885
60	37...50	75TSDA	MS23AI27*	50120
75	48...65	75TSDA	MS23AI28*	53520
100	62...99	100TSDA	MS23AI29*	69635
125		125TSDA	MS23AI30*	72315
150	84...135	150TSDA	MS23AI31*	90000
200	124...198	200TSDA	MS23AI32*	108155
250	174...279	250TSDA	MS23AI33*	136490
400	259...414	400TSDA	MS23AI34*	163810

*Coil Voltage Code

VOLTAGE	220	415
AC 50Hz	M5	N5

Note:- For Three and Single Phase, the standard Stockable Coil Voltages are 415V and 220V respectively.

Note:- Submersible Star-Delta Starter Panel Starters are available on request. Please consult our local Sales Office.

TeSys Starters DOL

Thermal protection Adjustment Range	Motor Power kW	Reference	Unit MRP [₹]
-------------------------------------	----------------	-----------	--------------

LE1-M Model Enclosed

- Conforming to IEC 947-4-1 for motors upto 7.5kW

0.54...0.8	0.25	LE1M35**05	3925
0.8...1.2	0.37	LE1M35**06	4400
1.2...1.8	0.55	LE1M35**07	4370
1.8...2.6	0.75	LE1M35**08	4630
2.6...3.7	1.50	LE1M35**10	
3.7...5.5	2.20	LE1M35**12	4370
5.5...8	3	LE1M35**14	
8...11.5	4	LE1M35**16	4630
10...14	5.50	LE1M35**21	4910
12...16	7.50	LE1M35**22	4630

** Coil Voltage Code

VOLTAGE	220/230	380/400	400/415
Code	M7	Q7	N7

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

✓ NORMAL STOCK ITEMS

W.E.F. January 27, 2020

Starters Spares

Spare Parts

Description	Lot Order Quantity	Reference	Unit MRP [₹]
For TDL, TRS & TSD/A Starters			
Pushbutton Actuator Assembly for 10/40/50/75/100/125 TDL	10	MSMC02	235
Pushbutton Switch Assembly for 10 TDL	10	MSMC03	465
Start Pushbutton Assembly for 40 - 400 TSDA	10	MSMI01	305
Stop Pushbutton Assembly for 40 - 400 TSDA	10	MSMI02	
9 Way Terminal Block for 15 TSDA	10	MSMI03	440
9 Way Terminal Block for 30 TSDA	10	MSMI04	
9 Way Terminal Block for 40 - 75 TSDA	10	MSMI05	1060
Electronic Timer for 15 - 400 TSDA	10	MSMI06	1870
Pushbutton Actuator Assembly for 15/20/30 TDL, 10/20 TRS & 15/30 TSDA	10	MSMK01	505

Note:- For Spare coil, contactor, O/L relay and accessories, please contact nearest sales office

For details on non standard references, technical parameters, accessories, compatibility, stockable and non stockable status please contact Customer Care

NORMAL STOCK ITEMS

W.E.F. January 27, 2020

Type 2 Co-ordination chart

Type 2 co-ordination chart for Direct-On-Line starter with circuit breaker and overload protection built into the circuit breaker

Reliable switching for IE2/IE3/IE4 motors



IE2



IE3



IE4

Rated operational voltage, $U_e = 400/415V, 50/60Hz$
Short Circuit Current (I_q) = 50kA

Sr. No.	3 Φ Motor power in kW	Current in A	Circuit Breaker	Setting range of thermal trips (A)	Contactor
1	0.06	0.2	GV2P02 or GV2ME02	0.16...0.25	LC1D09
2	0.09	0.3	GV2P03 or GV2ME03	0.25...0.4	LC1D09
3	0.12	0.44	GV2P04 or GV2ME04	0.4...0.63	LC1D09
4	0.18	0.6	GV2P04 or GV2ME04	0.4...0.63	LC1D09
5	0.25	0.85	GV2P05 or GV2ME05	0.63...1	LC1D09
6	0.37	1.1	GV2P05 or GV2ME05	0.63...1	LC1D09
7	0.55	1.5	GV2P06 or GV2ME06	1...1.6	LC1D09
8	0.75	1.9	GV2P07 or GV2ME07	1.6...2.5	LC1D09
9	1.1	2.7	GV2P08 or GV2ME08	2.5...4	LC1D09
10	1.5	3.6	GV2P08 or GV2ME08	2.5...4	LC1D09
11	2.2	4.9	GV2P10 or GV2ME10	4...6.3	LC1D09
12	3	6.5	GV2P14 or GV2ME14	6...10	LC1D09
13	4	8.5	GV2P14 or GV2ME14	6...10	LC1D09
14	5.5	11.5	GV2P16	9...14	LC1D25
15	7.5	15.5	GV2P20	13...18	LC1D25
16	9	18.1	GV2P21	17...23	LC1D25
17	11	22	GV2P22	20...25	LC1D25
18	15	29	GV2P32	25...40	LC1D32
19	18.5	35	GV3P40	30...40	LC1D50A
20	22	41	GV3P50	37...50	LC1D50A
21	30	55	GV3P65	48...65	LC1D65A
22	37	66	GV4PE/PEM80 ^{*(2)}	62...73	LC1D80
23	45	80	GV4PE/PEM115 ^{*(2)}	65...115	LC1D115
24	55	97	GV4PE/PEM115 ^{*(2)}	65...115	LC1D115
25	75	132	GV5P150 ^{*(2)}	70...150	LC1D150
26	90	160	GV5P220 ^{*(2)}	100...220	LC1F185
27	110	195	GV5P220 ^{*(2)}	100...220	LC1F225
28	132	230	GV6P320 ^{*(2)}	160...320	LC1F265
29	160	280	GV6P320 ^{*(2)}	160...320	LC1F330
30	220	385	GV6P500 ^{*(2)}	250...500	LC1F500
31	250	450	GV6P500 ^{*(2)}	250...500	LC1F500

(1) The breaking performance of circuit-breakers GV2 P can be increased by adding a current limiter GV1 L3

(2) Reference to be completed by replacing the * with the breaking performance code as per table given below:

Circuit breaker type	GV5P150*	GV5P220*	GV5P320*	GV6P500*	GV4PE/PEM80*	GV4PE/PEM115*
Breaking performance I_q (kA) at 400/415V	70	70	70	70	50	50
Breaking performance code	H	H	H	H	N	N

For advanced protection, protection with Electronic Overcurrent Relays, heavy starting, please contact our sales teams.

Type 2 Co-ordination chart

Type 2 co-ordination chart for Direct-On-Line starter with circuit breaker and separate thermal overload relay

Reliable switching for IE2/IE3/IE4 motors



IE2



IE3



IE4

Rated operational voltage, $U_e = 400/415V, 50/60Hz$
Short Circuit Current (I_q) = 50kA

Sr. No.	3Φ Motor power in kW	Current in Amps	Circuit Breaker	Contactor	Overload relay	
					Type	Range (A)
1	0.06	0.2	GV2L03 or GV2LE03	LC1D09	LRD02	0.16...0.25
2	0.09	0.3	GV2L03 or GV2LE03	LC1D09	LRD03	0.25...0.40
3	0.12	0.44	GV2L04 or GV2LE04	LC1D09	LRD04	0.4...0.63
4	0.18	0.6	GV2L04 or GV2LE04	LC1D09	LRD04	0.4...0.63
5	0.25	0.85	GV2L05 or GV2LE05	LC1D09	LRD05	0.63...1
6	0.37	1.1	GV2L05 or GV2LE05	LC1D09	LRD05	0.63...1
7	0.55	1.5	GV2L06 or GV2LE06	LC1D09	LRD06	1...1.7
8	0.75	1.9	GV2L07 or GV2LE07	LC1D09	LRD07	1.6...2.5
9	1.1	2.7	GV2L08 or GV2LE08	LC1D09	LRD08	2.5...4
10	1.5	3.6	GV2L08 or GV2LE08	LC1D09	LRD08	2.5...4
11	2.2	4.9	GV2L10 or GV2LE10	LC1D09	LRD10	4...6
12	3	6.5	GV2L14 or GV2LE14	LC1D09	LRD12	5.5...8
13	4	8.5	GV2L14 or GV2LE14	LC1D09	LRD14	7...10
14	5.5	11.5	GV2L16	LC1D25	LRD16	9...13
15	7.5	15.5	GV2L20	LC1D25	LRD21	12...18
16	9	18.1	GV2L22	LC1D25	LRD22	16...24
17	11	22	GV2L22	LC1D25	LRD22	16...24
18	15	29	GV3L32	LC1D40A	LRD332	23...32
19	18.5	35	GV3L40	LC1D50A	LRD340	30...40
20	22	41	GV3L50	LC1D50A	LRD350	37...50
21	30	55	GV3L65	LC1D65A	LRD365	48...65
22	37	66	GV4L/LE80 ⁽¹⁾	LC1D80	LRD3363	63...80
23	45	80	GV4L/LE115 ⁽¹⁾	LC1D115	LR9D5367	60...100
24	55	97	GV4L/LE115 ⁽¹⁾	LC1D115	LR9D5369	90...150
25	75	132	NSX160*MA ⁽¹⁾	LC1D150	LR9D5369	90...150
26	90	160	NSX250*MA ⁽¹⁾	LC1F185	LR9F5371	132...220
27	110	195	NSX250*MA ⁽¹⁾	LC1F225	LR9F5371	132...220
28	132	230	NSX400* + Mic 1.3M ⁽¹⁾	LC1F265	LR9F7375	200...330
29	160	280	NSX400* + Mic 1.3M ⁽¹⁾	LC1F330	LR9F7375	200...330
30	200	350	NSX630* + Mic 1.3M ⁽¹⁾	LC1F400	LR9F7379	300...500
31	220	388	NSX630* + Mic 1.3M ⁽¹⁾	LC1F500	LR9F7379	300...500
32	250	430	NSX630* + Mic 1.3M ⁽¹⁾	LC1F500	LR9F7379	300...500

(1) Reference to be completed by replacing the * with the breaking performance code as per table given below:

Circuit breaker type	NSX100*MA	NSX160*MA, NSX250*MA	NSX400* NSX630*	GV4L/LE80*	GV4L/LE115*
Breaking performance I_q (kA) at 400/415V	50	50	50	50	50
Breaking performance code	N	N	N	N	N

For advanced protection, protection with Electronic Overcurrent Relays, heavy starting, please contact our sales teams.

Type 2 Co-ordination chart

Type 2 co-ordination chart for Star Delta starters with circuit-breaker and separate thermal overload relay

Reliable switching for IE2/IE3/IE4 motors



IE2



IE3



IE4

Rated operational voltage, $U_e = 400/415V, 50/60Hz$
Short Circuit Current (I_q) = 50kA

Sr. No.	3 Φ Motor power in kW	Line current in Amps	Phase current in Amps	Circuit Breaker	Main/Delta Contactor	Star Contactor	Overload Relay	
							Type	Range (A)
1	5.5	11.5	6.6	GV2L16	LC1D25	LC1D09	LRD12	5.5..8
2	7.5	15.5	8.9	GV2L20	LC1D25	LC1D09	LRD14	7..10
3	9	18.1	10.5	GV2L22	LC1D25	LC1D09	LRD16	9..13
4	11	22	12.7	GV2L22	LC1D25	LC1D09	LRD21	12..18
5	15	29	16.7	GV3L32	LC1D40A	LC1D09	LRD318	12..18
6	18.5	35	20.2	GV3L40	LC1D50A	LC1D09	LRD325	17..25
7	22	41	23.7	GV3L50	LC1D50A	LC1D18	LRD332	23..32
8	30	55	31.8	GV3L65	LC1D65A	LC1D18	LRD340	30..40
9	37	66	38.1	GV3L73	LC1D80A	LC1D32	LRD350	37..50
10	37	66	38.1	GV4L/LE80 ⁽¹⁾	LC1D80A	LC1D32	LRD3357	37..50
11	45	80	46.2	GV4L/LE115 ⁽¹⁾	LC1D115	LC1D65A	LRD3357	37..50
12	55	97	56	GV4L/LE115 ⁽¹⁾	LC1D115	LC1D65A	LRD3359	48..65
13	75	132	76.2	NSX160*MA150 ⁽¹⁾	LC1D150	LC1D65A	LR9D5367	60 ... 100
14	90	160	92.4	NSX250*MA220 ⁽¹⁾	LC1F185	LC1D80	LR9F5367	60 ... 100
15	110	195	112.6	NSX250*MA220 ⁽¹⁾	LC1F225	LC1D80	LR9F5369	90 ... 150
16	132	230	132.8	NSX400*Mic 1.3M ⁽¹⁾	LC1F265	LC1D115	LR9F5369	90 ... 150
17	160	280	161.7	NSX400*Mic 1.3M ⁽¹⁾	LC1F330	LC1D150	LR9F5371	132 ... 220
18	200	350	202.1	NSX630*Mic 1.3M ⁽¹⁾	LC1F400	LC1F185	LR9F5371	132 ... 220
19	220	388	224	NSX630*Mic 1.3M ⁽¹⁾	LC1F400	LC1F185	LR9F7375	200 ... 330
20	250	430	248.3	NSX630*Mic 1.3M ⁽¹⁾	LC1F500	LC1F265	LR9F7375	200 ... 330

(1) Reference to be completed by replacing the * with the breaking performance code as per table given below:

Circuit breaker type	NSX100*MA	NSX160*MA, NSX250*MA	NSX400* NSX630*	GV4L/LE80*	GV4L/LE115*
Breaking performance I_q (kA) at 400/415V	50	50	50	50	50
Breaking performance code	N	N	N	N	N

For advanced protection, protection with Electronic Overcurrent Relays, heavy starting, please contact our sales teams.

Type 2 Co-ordination chart

Type 2 co-ordination chart for Star Delta starter with circuit breaker and overload protection built into circuit breaker

Reliable switching for IE2/IE3/IE4 motors



IE2



IE3



IE4

Rated operational voltage, $U_e = 400/415V, 50/60Hz$
Short Circuit Current (I_q) = 50kA / 70kA as per table

Sr. No.	3 Φ Motor power in kW	Line current in Amps	Phase current in Amps	I_q (kA)	Circuit Breaker	Main/Delta Contactor	Star Contactor
1	5,5	11.5	6.6	50	GV2P16	LC1D25	LC1D09
2	7,5	15.5	8.9	50	GV2P20	LC1D25	LC1D09
3	9	18.1	10.5	50	GV2P21	LC1D25	LC1D09
4	11	22	12.7	50	GV2P22	LC1D25	LC1D09
5	15	29	16,7	50	GV3P32	LC1D40A	LC1D09
6	18,5	35	20.2	50	GV3P40	LC1D50A	LC1D09
7	22	41	23.7	50	GV3P50	LC1D50A	LC1D18
8	30	55	31.8	50	GV3P65	LC1D65A	LC1D32
9	37	66	38.1	50	GV3P73	LC1D80A	LC1D32
10	37	66	38.1	70	GV4PE/PEM80 ⁽¹⁾	LC1D80A	LC1D32
11	45	80	46.2	70	GV4PE/PEM115 ⁽¹⁾	LC1D115	LC1D65A
12	55	97	56.0	70	GV4PE/PEM115 ⁽¹⁾	LC1D115	LC1D65A
13	75	132	76.2	70	GV5P150 ⁽¹⁾	LC1 D150	LC1D150
14	90	160	92.4	70	GV5P220 ⁽¹⁾	LC1 F185	LC1F185
15	110	195	112.6	70	GV5P220 ⁽¹⁾	LC1 F225	LC1F225
16	132	230	132.8	70	GV6P320 ⁽¹⁾	LC1F265	LC1F265
17	160	280	161.7	70	GV6P320 ⁽¹⁾	LC1F265	LC1F265
18	220	388	224.0	70	GV6P500 ⁽¹⁾	LC1F500	LC1F500
19	250	430	248.3	70	GV6P500 ⁽¹⁾	LC1F500	LC1F500

(1) Reference to be completed by replacing the * with the breaking performance code as per table given below:

Circuit breaker type	GV5P150*	GV5P220*	GV5P320*	GV6P500*	GV4PE/PEM80*	GV4PE/PEM115*
Breaking performance I_q (kA) at 400/415V	70	70	70	70	50	50
Breaking performance code	H	H	H	H	N	N

Type 2 Co-ordination chart

Type 2 Co-ordination chart for Direct-On-Line starter with circuit breaker and separate thermal overload relay

Reliable switching for IE2/IE3/IE4 motors



IE2



IE3



IE4

Sr. No.	3Φ Motor power in kW	Circuit Breaker	Contactors	Thermal Overload Relay
1	0.18	GV4L/LE02*	LC1D09	LRD05
2	0.25	GV4L/LE02*	LC1D09	LRD05
3	0.37	GV4L/LE02*	LC1D09	LRD06
4	0.55	GV4L/LE02*	LC1D09	LRD06
5	0.75	GV4L/LE02*	LC1D09	LRD07
6	1.1	GV4L/LE03*	LC1D25	LRD08
7	1.5	GV4L/LE07*	LC1D32+GV1L3	LRD08
8	2.2	GV4L/LE07*	LC1D32+GV1L3	LRD10
9	3	GV4L/LE07*	LC1D40A	LRD12
10	4	GV4L/LE12*	LC1D65A	LRD14
11	5.5	GV4L/LE12*	LC1D65A	LRD313
12	7.5	GV4L/LE25*	LC1D65A	LRD318
13	10	GV4L/LE25*	LC1D65A	LRD325
14	11	GV4L/LE25*	LC1D65A	LRD325
15	15	GV4L/LE50*	LC1D65A	LRD332
16	18.5	GV4L/LE50*	LC1D65A	LRD340
17	22	GV4L/LE50*	LC1D65A	LRD350
18	30	GV4L/LE80*	LC1D65A	LRD365

* - Reference to be completed by replacing the * with the breaking performance code as per table given below:

Performance I_q (kA) at 415V

Circuit breaker	Breaking performance code		
	B	N	S
GV4L/LE02-12	-	50	100
GV4L/LE25-115	25	50	100

For Star Delta selection, use contactor same as DOL for Main, Star and Delta.

Type-2 Co-ordination Chart

Type 2 Co-ordination chart for Direct-On-Line starter with Fuses and overload protection by separate thermal overload relay

Reliable switching for IE2/IE3 motors



IE2



IE3

Rated operational voltage, $U_e = 400/415V, 50/60Hz$
Short Circuit Current (I_q) = 50kA

Sr. No.	3Φ Motors, 415V, 50Hz			SDF (NX Range)	Fuse	Fuse Rating	Contactor	Overload Relay	
	kW	HP	FLC - I_n (Amps)					Type	Range (A)
1	0.37	0.5	1	NX32	6NHG000B	6	LC1E09	LRE06	1.0 - 1.6
2	0.55	0.75	1.5	NX32	6NHG000B	6	LC1E09	LRE06	1.0 - 1.6
3	0.75	1	2	NX32	6NHG000B	6	LC1E09	LRE07	1.6 - 2.5
4	1.5	2	3.5	NX32	16NHG000B	16	LC1E09	LRE08	2.5 - 4.0
5	2.2	3	5	NX32	16NHG000B	16	LC1E09	LRE10	4.0 - 6.0
6	3	4	6.8	NX32	20NHG000B	20	LC1E09	LRE12	5.5 - 8.0
7	4	5.5	8.4	NX32	20NHG000B	20	LC1E09	LRE14	7.0 - 10
8	5.5	7.5	11.2	NX32	25NHG000B	25	LC1E12	LRE16	9.0 - 13
9	7.5	10	14	NX63	40NHG000B	40	LC1E18	LRE21	12.0 - 18
10	9	12	18	NX63	50NHG000B	50	LC1E25	LRE22	16 - 24
11	11	15	21	NX63	50NHG000B	50	LC1E32	LRE22	16 - 24
12	15	20	28.5	NX63	63NHG000B	63	LC1E32	LRE32	23 - 32
13	18.5	25	34	NX80	80NHG000B	80	LC1E40	LRE355	30 - 40
14	22	30	42	NX80	80NHG000B	80	LC1E50	LRE357	37 - 50
15	30	40	57	NX100	100NHG000B	100	LC1E65	LRE359	48 - 65
16	37	50	70	NX125	125NHG000B	125	LC1E80	LRE363	63 - 80
17	45	60	81	NX160	160NHG000B	160	LC1E95	LRE365	80 - 104
18	56	75	100	NX160	160NHG000B	160	LC1E120	LRE482	84 - 135
19	80	107	138	NX250	250NHG1B	250	LC1E160	LRE483	124 - 198
20	90	120	165	NX250	250NHG1B	250	LC1E160	LRE483	124 - 198
21	100	135	182	NX315	315NHG2B	315	LC1E200	LRE483	124 - 198
22	110	150	196	NX315	315NHG2B	315	LC1E200	LRE483	124 - 198
23	132	177	240	NX400	355NHG2B	355	LC1E250	LRE485	174 - 279
24	160	215	285	NX400	400NHG2B	400	LC1E300	LRE486	208 - 333

Type 2 Co-ordination chart for Star Delta starter with Fuses and overload protection by separate thermal overload relay

Reliable switching for IE2/IE3 motors



IE2



IE3

Rated operational voltage, $U_e = 400/415V, 50/60Hz$
Short Circuit Current (I_q) = 50kA

Sr. No.	3Φ Motors				SDF	Fuse	Fuse Rating	Contactor		Overload Relay	
	kW	HP	FLC - I_n (Amps)					Star Contactor	Main / Delta Contactor	Type	Range (A)
			Line (A)	Phase (A)							
1	1.5	2	4	2.3	NX32	10NHC00G	10	LC1E09	LC1E09	LRE07	1.6-2.5
2	2.2	3	5	3	NX32	16NHC00G	16	LC1E09	LC1E09	LRE08	2.5-4
3	3	4	7	4	NX32	16NHC00G	16	LC1E09	LC1E09	LRE08	2.5-4
4	4	5.3	9	5	NX32	20NHC00G	20	LC1E09	LC1E09	LRE10	4-6
5	5.5	7.5	10	6	NX32	20NHC00G	20	LC1E09	LC1E09	LRE12	5.5-8
6	7.5	10	16	9	NX32	32NHC00G	32	LC1E09	LC1E09	LRE14	7-10
7	9	12	17	10	NX32	32NHC00G	32	LC1E09	LC1E12	LRE14	7-10
8	11	15	21	12	NX63	50NHC00G	50	LC1E12	LC1E12	LRE16	9-13
9	15	20	28	16	NX63	63NHC00G	63	LC1E18	LC1E18	LRE21	12-18
10	22	30	42	24	NX80	80NHC00G	80	LC1E25	LC1E25	LRE32	23-32
11	30	40	57	33	NX125	100NHG00B	100	LC1E40	LC1E40	LRE355	30-40
12	45	60	81	47	NX125	125NHG00B	125	LC1E40	LC1E50	LRE357	37-50
13	55	75	100	58	NX125	125NHG00B	125	LC1E40	LC1E65	LRE359	48-65
14	80	107	139	80	NX200	200NHG1B	200	LC1E80	LC1E80	LRE363	63-80
15	110	150	196	113	NX315	315NHG2B	315	LC1E300	LC1E300	LRE482	84~135
16	160	215	286	165	NX400	355NHG2B	355	LC1E300	LC1E300	LRE483	124~198

Selection Chart

Fuseless - Direct-on-Line starters with circuit-breaker and overload protection by separate thermal overload relay

Reliable
switching for
IE2/IE3 motors



IE2



IE3

Rated operational voltage, $U_e = 400/415V, 50/60Hz$

Short Circuit Current (I_q) = 50kA

Sr. No.	3 Φ Motors			Contactor	Overload Relay		Circuit Breaker			
	kW	HP	FLC - I_n (Amps)		Type	Range (A)	Type	Trip Unit Rating	Magnetic Setting Range	Setting on Trip Unit in Amps
1	0.37	0.5	1.4	LC1E09	LRE06	1-1.6	CVS100-MA	2.5	6-14	15
2	0.55	0.75	1.7	LC1E09	LRE07	1.6-2.5	CVS100-MA	2.5	6-14	17.5
3	0.75	1	2.2	LC1E09	LRE07	1.6-2.5	CVS100-MA	2.5	6-14	22.5
4	1.1	1.5	2.9	LC1E09	LRE08	2.5-4	CVS100-MA	6.3	6-14	31.5
5	1.3	1.75	3	LC1E09	LRE08	2.5-4	CVS100-MA	6.3	6-14	31.5
6	1.5	2	3.8	LC1E09	LRE08	2.5-4	CVS100-MA	6.3	6-14	37.8
7	2.2	3	5.1	LC1E18	LRE10	4-6	CVS100-MA	6.3	6-14	63
8	3	4	6	LC1E18	LRE10	4-6	CVS100-MA	6.3	6-14	69.3
9	3.7	5	8.1	LC1E25	LRE14	7-10	CVS100-MA	12.5	6-14	100
10	4	5.5	8.5	LC1E25	LRE14	7-10	CVS100-MA	12.5	6-14	100
11	5.5	7.5	11.4	LC1E32	LRE16	9-13	CVS100-MA	12.5	6-14	137.5
12	7.5	10	15.4	LC1E32	LRE21	12-18	CVS100-MA	25	6-14	175
13	9.3	12.5	17.3	LC1E32	LRE21	12-18	CVS100-MA	25	6-14	200
14	11	15	22	LC1E38	LRE22	16-24	CVS100-MA	25	6-14	275
15	13	17.5	24	LC1E40	LRE22	16-24	CVS100-MA	25	6-14	300
16	15	20	30	LC1E50	LRE32	23-32	CVS100-MA	50	6-14	350
17	18.5	25	36	LC1E65	LRE35	30-38	CVS100-MA	50	6-14	450
18	22	30	43	LC1E65	LRE357	37-50	CVS100-MA	50	6-14	500
19	30	40	56	LC1E80	LRE359	48-65	CVS100-MA	100	6-14	700
20	37	50	69	LC1E95	LRE361	55-70	CVS100-MA	100	6-14	800
21	45	60	84	LC1E120	LRE482	84-135	CVS100-MA	100	6-14	1000
22	55	75	99	LC1E160	LRE482	84-135	CVS100-MA	100	6-14	1200
23	75	100	134	LC1E160	LRE482	84-135	CVS250-MA	150	9-14	1650
24	80	110	139	LC1E160	LRE483	124-198	CVS250-MA	150	9-14	1650
25	90	120	164	LC1E200	LRE483	124-198	CVS250-MA	220	9-14	1980
26	110	150	204	LC1E250	LRE484	146-234	CVS250-MA	220	9-14	2420
27	125	170	234	LC1E300	LRE484	146-234	CVS400-MA	320	6-13	2880
28	132	180	247	LC1E300	LRE485	174-279	CVS400-MA	320	6-13	3200
29	160	215	288	LC1E400	LRE486	208-333	CVS400-MA	320	6-13	3520
30	180	240	298	LC1E400	LRE486	208-333	CVS400-MA	320	6-13	3520
31	200	270	348	LC1E400	LRE487	258-414	CVS630-MA	500	6-13	4500
32	225	300	360	LC1E500	LRE487	258-414	CVS630-MA	500	6-13	4500
33	250	335	435	LC1E500	LRE488	321-513	CVS630-MA	500	6-13	5500
34	275	370	440	LC1E630	LRE489	394-630	CVS630-MA	500	6-13	5500

Selection Chart

Fuseless - Star Delta starters with circuit-breaker and overload protection by separate thermal overload relay

Reliable
switching for
IE2/IE3 motors



IE2



IE3

Rated operational voltage, $U_e = 400/415V, 50/60Hz$
Short Circuit Current (I_q) = 50kA

Sr. No.	3 Φ Motors				Contactor			Overload Relay		Circuit Breaker			
	kW	HP	FLC - I_n (Amps)					Type	Range (A)	Type	Trip Unit Rating	Magnetic Setting Range	Setting on Trip Unit in Amps
			Line	Phase	Main	Delta	Star						
1	0.75	1	2.2	1.3	LC1E09	LC1E09	LC1E09	LRE06	1-1.6	CVS100-MA	6.3	6-14	37.8
2	1.1	1.5	2.9	1.7	LC1E09	LC1E09	LC1E09	LRE07	1.6-2.5	CVS100-MA	6.3	6-14	50.4
3	1.3	1.8	3	1.7	LC1E09	LC1E09	LC1E09	LRE07	1.6-2.5	CVS100-MA	6.3	6-14	50.4
4	1.5	2	3.8	2.2	LC1E09	LC1E09	LC1E09	LRE07	1.6-2.5	CVS100-MA	6.3	6-14	63
5	2.2	3	5.1	2.9	LC1E09	LC1E09	LC1E09	LRE08	2.5-4	CVS100-MA	12.5	6-14	100
6	3	4	6	3.5	LC1E09	LC1E09	LC1E09	LRE08	2.5-4	CVS100-MA	12.5	6-14	112.5
7	3.7	5	8.1	4.7	LC1E09	LC1E09	LC1E09	LRE10	4-6	CVS100-MA	12.5	6-14	150
8	4	5.5	8.5	4.9	LC1E09	LC1E09	LC1E09	LRE10	4-6	CVS100-MA	12.5	6-14	162.5
9	5.5	7.5	11.4	6.6	LC1E12	LC1E12	LC1E09	LRE12	5.5-8	CVS100-MA	25	6-14	225
10	7.5	10	15.4	8.9	LC1E18	LC1E18	LC1E09	LRE14	7-10	CVS100-MA	25	6-14	300
11	9.3	13	17.3	10	LC1E25	LC1E25	LC1E12	LRE14	7-10	CVS100-MA	25	6-14	325
12	11	15	22	12.7	LC1E25	LC1E25	LC1E12	LRE16	9-13	CVS100-MA	50	6-14	400
13	13	18	24	13.9	LC1E32	LC1E32	LC1E12	LRE21	12-18	CVS100-MA	50	6-14	450
14	15	20	30	17.3	LC1E32	LC1E32	LC1E18	LRE21	12-18	CVS100-MA	50	6-14	550
15	18.5	25	36	20.8	LC1E38	LC1E38	LC1E25	LRE22	16-24	CVS100-MA	50	6-14	700
16	22	30	43	24.8	LC1E40	LC1E40	LC1E32	LRE32	23-32	CVS100-MA	100	6-14	800
17	30	40	56	32.3	LC1E50	LC1E50	LC1E38	LRE355	30-40	CVS100-MA	100	6-14	1100
18	37	50	69	39.8	LC1E65	LC1E65	LC1E40	LRE355	30-40	CVS100-MA	100	6-14	1300
19	45	60	84	48.5	LC1E80	LC1E80	LC1E50	LRE357	37-50	CVS250-MA	150	9-14	1650
20	55	75	99	57.2	LC1E95	LC1E95	LC1E65	LRE359	48-65	CVS250-MA	150	9-14	1950
21	75	100	134	77.4	LC1E120	LC1E120	LC1E80	LRE481	62-99	CVS250-MA	220	9-14	2640
22	80	110	139	80.3	LC1E120	LC1E120	LC1E80	LRE481	62-99	CVS250-MA	220	9-14	2640
23	90	120	164	94.7	LC1E160	LC1E160	LC1E95	LRE482	84-135	CVS250-MA	220	9-14	3080
24	110	150	204	117.8	LC1E200	LC1E200	LC1E120	LRE482	84-135	CVS400-MA	320	6-13	3840
25	125	170	234	135.1	LC1E250	LC1E250	LC1E120	LRE483	124-198	CVS630-MA	500	6-13	4500
26	132	180	247	142.6	LC1E250	LC1E250	LC1E120	LRE483	124-198	CVS630-MA	500	6-13	5000
27	150	200	248	143.2	LC1E250	LC1E250	LC1E120	LRE483	124-198	CVS630-MA	500	6-13	5000
28	160	215	288	166.3	LC1E300	LC1E300	LC1E160	LRE483	124-198	CVS630-MA	500	6-13	5500
29	180	240	298	172.1	LC1E300	LC1E300	LC1E160	LRE483	124-198	CVS630-MA	500	6-13	6000
30	200	270	348	200.9	LC1E400	LC1E400	LC1E200	LRE484	146-234	CVS630-MA	500	6-13	6500
31	225	300	360	207.9	LC1E400	LC1E400	LC1E200	LRE484	146-234	CVS630-MA	500	6-13	6500
32	250	335	435	251.2	LC1E400	LC1E400	LC1E250	LRE485	174-279	CVS630-MA	500	6-13	6500
33	275	370	440	254	LC1E400	LC1E400	LC1E250	LRE485	174-279	CVS630-MA	500	6-13	6500
34	315	425	548	316.4	LC1E500	LC1E500	LC1E300	LRE486	208-333	CVS630-MA	500	6-13	6500

Selection Chart

Fuseless - Direct-on-Line starters with circuit-breaker and overload protection built into the circuit-breaker

Reliable
switching for
IE2/IE3 motors



IE2



IE3

Rated operational voltage, $U_e = 400/415V, 50/60Hz$
Short Circuit Current (I_q) = 50kA / 10kA

Sr. No.	3 Φ Motors			I _q Current (kA)	Contactor	Overload Relay		Circuit Breaker	
	kW	HP	FLC - I _n (Amps)			Type	Range (A)	Type	Rating (A)
1	0.06	x	0.19	50	LC1E09	In-built in Circuit Breaker		GZ1E02	0.16 - 0.25
2	0.09	x	0.28	50	LC1E09		GZ1E03	0.25 - 0.4	
3	0.12	0.16	0.51	50	LC1E09		GZ1E04	0.4 - 0.63	
4	0.18	0.25	0.6	50	LC1E09		GZ1E04	0.4 - 0.63	
5	0.25	0.33	0.8	50	LC1E09		GZ1E05	0.63 - 1	
6	0.37	0.5	1.4	50	LC1E09		GZ1E06	1 - 1.6	
7	0.55	0.75	1.7	50	LC1E09		GZ1E07	1.6 - 2.5	
8	0.75	1	2.2	50	LC1E09		GZ1E07	1.6 - 2.5	
9	1.1	1.5	2.9	50	LC1E09		GZ1E08	2.5 - 4	
10	1.3	1.75	3	50	LC1E09		GZ1E08	2.5 - 4	
11	1.5	2	3.8	50	LC1E09		GZ1E08	2.5 - 4	
12	2.2	3	5.1	50	LC1E18		GZ1E10	4 - 6.3	
13	3	4	6	50	LC1E18		GZ1E14	6 - 10	
14	3.7	5	8.1	50	LC1E25		GZ1E14	6 - 10	
15	4	5.5	8.5	50	LC1E25		GZ1E14	6 - 10	
16	5.5	7.5	11.4	10	LC1E32		GZ1E16	9 - 14	
17	7.5	10	15.4	10	LC1E32		GZ1E20	13 - 18	
18	9.3	12.5	17.3	10	LC1E40		GZ1E21	17 - 23	
19	11	15	22	10	LC1E40		GZ1E22	20 - 25	
20	13	17.5	24	10	LC1E50		GZ1E32	24 - 32	
21	15	20	30	10	LC1E50		GZ1E32	24 - 32	

Life Is On

Schneider
Electric

Schneider Electric India Pvt. Ltd.

Corporate Office: 9th Floor, DLF Building No. 10, Tower C, DLF Cyber City, Phase II, Gurugram 122002 Haryana
Tel.: ++91 124 3940400 Fax: ++91 124 4222036/ 037

Ahmedabad
Schneider Electric India (P) Ltd.
1506-1507, 15th Floor Shapth-5,
SG Highway, Ahmedabad - 380015
Tel.: 079-66826701

Cochin
Schneider Electric India (P) Ltd.
41 / 406- D1,3rd Floor, Beejay Towers,
Rajaji Road Cochin- 682035
Tel.: 0484-3048401

Ludhiana
Schneider Electric India (P) Ltd.
Office No. - 3, 5th Floor, Novelty Plaza
Bhaiwala Chowk
Ludhiana- 140001
Tel.: 0161- 4656672-75

Secunderabad
D.No. 1-8-271, # 401, Ashoka Bhoopal
Chambers, SP Road,
Secunderabad - 500003
Tel.: 04039404000
Fax.: 040-39131313

Bengaluru
Schneider Electric India (P) Ltd.
No. 3/1, JP Techno Park,
Mezzanine Floor, Millers Tank Bund
Road, Vasanth Nagar,
Bengaluru - 560052. Tel.: 080-71481351

Coimbatore
Schneider Electric India (P) Ltd.
No. -104, Classic Tower, 3rd Floor,
Trichy Road, Coimbatore- 641018
Tel.: 0422-3940400

Mumbai
Schneider Electric India (P)(Ltd)
Marwah House, 2nd Floor
Krishanlal Marwah Marg,
Andheri (East), Mumbai - 400072
Tel.: 91-22-30263300

Vadodara
605 & 606, 6th Floor Ocean Building,
Opp.Vadodara Central, Sarabhai Road,
Vadodara-390005
Tel.: 0265-3940400

Bhubaneswar:
Schneider Electric India (P) Ltd.
6th Floor, Block A, JSS Software Technology park , E 1/1 , Chandaka Industrial Estate, Info City , Bhubaneswar -751025
Tel.: 0674-6672000

Jaipur
Schneider Electric India (P) Ltd.
Jaipur Business Centre 309, 3rd
Floor, Sangam Tower 190, Church
Road, Jaipur-302001
Tel.: 0141-3912903

Nagpur
Schneider Electric India (P) Ltd.
Fortune Business Centre, 6,
Basant Vihar, W.H.C Road
Shankar Nagar, Nagpur- 440010
Tel.: 0712-2558581

Vishakhapatnam
Schneider Electric India (P) Ltd.
Ratnam's Business Centre,
D.N.10-1-43, 1st Floor
Siripuram Fort,C.B.M.Compound,
Visakhapatnam- 530016
Tel.: 0891 - 2508990

Chandigarh
Schneider Electric India (P) Ltd.
2nd Floor of Tower A
Bestech Business Tower
Sector-66
Mohali- 160059
Tel.: 0172-3324500

Kolkata
Schneider Electric (I) Pvt.Ltd,
BP-4, Sector-V
Technopolis
3rd floor, Salt Lake City
Kolkata- 700 091
Tel.: 033-333640100-101

Nashik:
Schneider Electric India (P) Ltd.
401, 4th Floor Rishi Raj Towers, Jehan
Circle, Gangapur Road,
Nashik- 422013
Tel: +91-7620498557

Chennai
Schneider Electric India (P) Ltd.
No:29, 2nd floor, Bannari Amman Towers,
B-Block,RK Salai, Mylapore
Chennai - 600 004
Tel.:044- 39404000

Lucknow
Schneider Electric India (P) Ltd.
1st Floor, Asha Bhawan 27 / II -A,
Gokhale Marg, Lucknow- 226001
Tel.: 0522-4006010

Pune
Schneider Electric India (P) Ltd.
1st Floor, R.B. Business Centre
Above Dass Electronics
Sanghvi Nagar, Aundh, Pune- 411007
Tel.: 020-39404000

Customer Care Centre

Monday-Saturday, 9 a.m. to 8 p.m.
Toll-free numbers: 1800 419 4272, 1800 103 0011
Email: customercare.in@schneider-electric.com

For more information, visit our website at: www.se.com/in

- All Prices are in Indian Rupees.
- Prices are subject to change without notice.
- Prices charged will be as prevailing on the date of dispatch.
- Maximum Retail Price (MRP) is inclusive of all taxes

- Tax incidence on invoices is basis applicable GST rates. Invoice amount not to exceed MRP
- Invoice Amount = (MRP – less Applicable discount) + Applicable GST %

Distributor