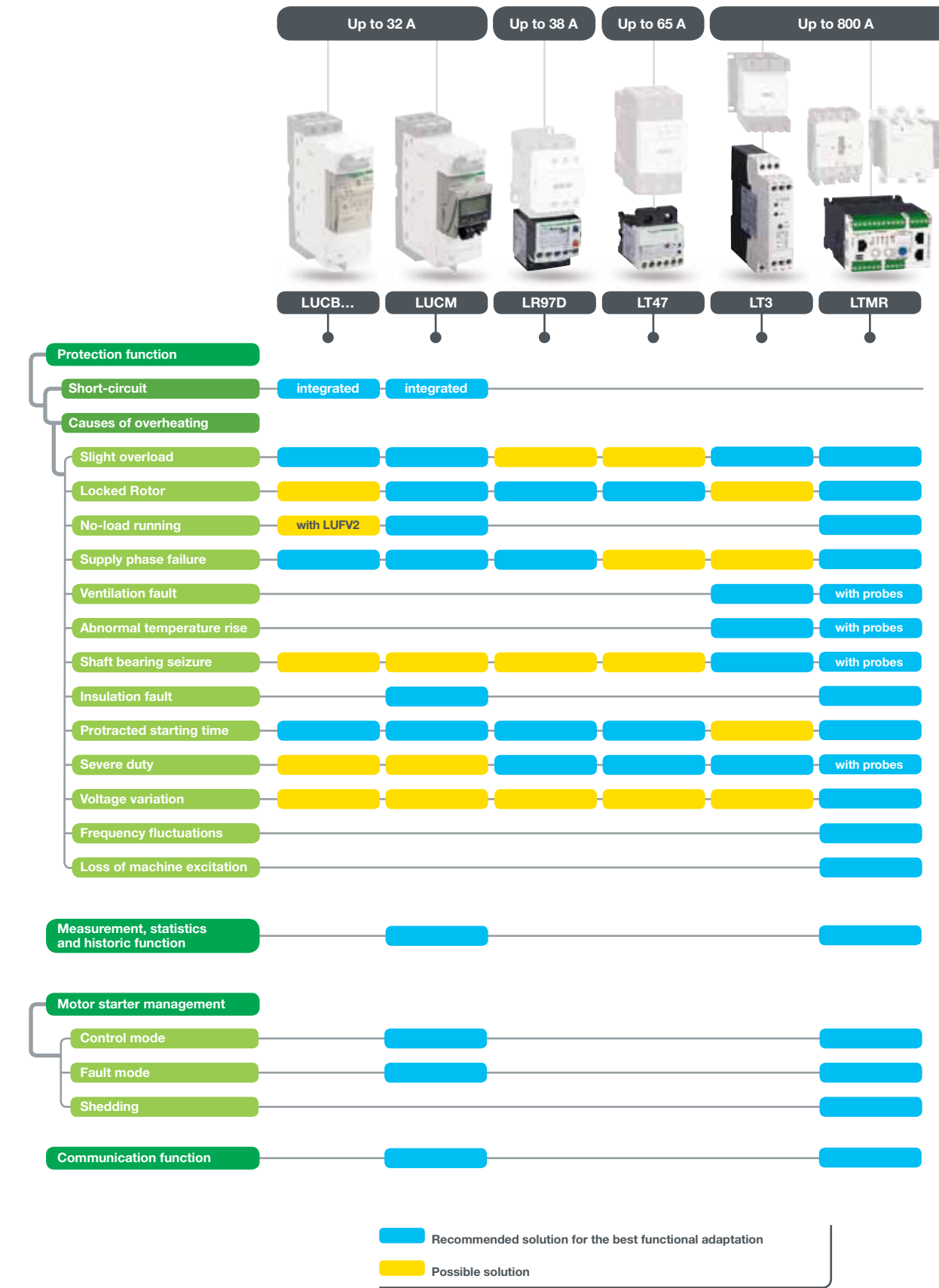


# TeSys Advanced

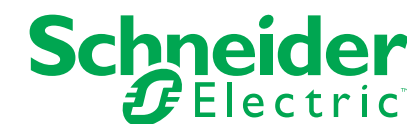


To discover the TeSys range, connect on:  
[www.schneider-electric.com/tesys](http://www.schneider-electric.com/tesys)

## Make the most of your energy™

Schneider Electric Industries SAS

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# Let TeSys® be your drive

Overview of solutions to protect, monitor and control



# TeSys

## Keep your motors running

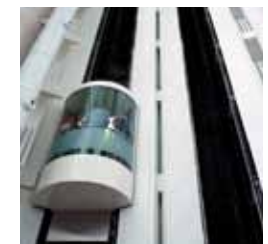
TeSys motor starters leverage 90 years of experience and innovation to protect, monitor, and control your motors. Compact, reliable, and intuitive to install and operate, TeSys products cover all your needs:

- > From installation design to operation,
- > From 0.37 kW to 900 kW, 400 V/AC3 motor power.

## Get the ultimate in protection

The TeSys product line includes a broad range of protection devices, from the simplest and most flexible to the most advanced and powerful. Protect your motors from short circuits and overheating due to weak overload, locked rotor, isolation fault, or abnormal temperature rise.

## Let TeSys be your drive



**+**

**TeSys products, for safety you can trust**

As part of TeSys range, TeSys contactors\* are used for machine and process protection you can rely on to keep people and property safe.

Schneider Electric gives a B10d value for all TeSys contactors to determine the performance level (PL) as stipulated in the EN/ISO 13849-1 standard or the safety integrated level (SIL) as stipulated in the EN/IEC 62061 standard for processes and machines.

To ensure the self-control features required by the standards, TeSys contactors are equipped with integrated mirror contacts.

The TeSys product line also includes all of the isolation, protection, and emergency handling components (circuit breakers and switches with an emergency kill handle, enclosed starters, etc.) you need to comply with the EN/IEC 60204-1 and the EN/ISO 13850 standards.

\*To help you more easily identify TeSys safety features, all TeSys Safety products will be marked in red starting in 2014.

# TeSys Universal

Build your motor starter!

Range name	TeSys K, D, F	TeSys GV	TeSys GVL	TeSys GS	TeSys K, D, F	TeSys U	TeSys Vario	TeSys DF
Product reference prefix	LC	GV	GVL	GS	LR	LU	V	DF
Motor starter structure - 4 functions to be covered:								
Disconnection and breaking	■	■	■	■	■	■	■	■
Short-circuit protection	■	■	■	■	■	■	■	■
Overload protection	■	■	■	■	■	■	■	■
Control	■	■	■	■	■	■	■	■

	AC	DC	DC<math>\leq 2.4\text{ W}</math>	DC	AC/DC	AC/DC	AC 40/400
24 V	B7	B0	BL	BW	B/BL		
48 V	E7	ED	EL	EW	E/EL		
72 V		SD	SL	SW	S/SL		
110 V	F7	FD		FW	F/W		F
220 V	M7			FU	M/W		M
230 V	P7			FU	M/W		M
400 V	V7			GW	V		V



Vario  
Main switch disconnector  
Switch disconnector  
Emergency stop

Mounting	Ø 22.5 fixing	Ø 22.5 fixing	Ø 22.5 fixing	Ø 22.5 fixing	Ø 22.5 fixing	Ø 22.5 fixing	Ø 22.5 fixing
Door mounting	VBDN12	VBDN20	VBD02	VBD01	VBD0	VBD1	VBD2
Mounting at back of enclosure	VCCDN12	VCCDN20	VCCF02	VCCF01	VCCF0	VCCF1	VCCF2
Door mounting	VCDN12	VCDN20	VCF02	VCF01	VCF0	VCF1	VCF2

Thermal current Ith (A)	12	20	25	32	40	63	80	125	175
Mini-Vario for standard applications	VBDN12	VBDN20							
Vario for high performance applications	VBD02	VBD01	VBD0	VBD1	VBD2	VBF3	VBF4	VBF5	VBF6
	VCCF02	VCCF01	VCCF0	VCCF1	VCCF2	VCCF3	VCCF4	VCCF5	VCCF6
	VCD02	VCD01	VCD0	VCD1	VCD2	VCF3	VCF4	VCF5	VCF6

Thermal current Ith (A)	25	32	50	125
Fuse type	8x32	10x38	14x51	22x58
Fuse carrier	DF81	DF101	DF141	DF221
	DF82	DF102	DF142	DF222
	DF83	DF103	DF143	DF223

Motor power	AC3	0,37...0,55 kW	0,75 kW	1,1...1,5 kW	2,2 kW	3 kW	4 kW	5,5 kW
TeSys K mini contactor		6 A						
le max. AC3 (Ue ≤ 440 V)		20 A	20 A	20 A	20 A	20 A	20 A	20 A
le AC1 (T < 60°C)		20 A	20 A	20 A	20 A	20 A	20 A	20 A
Contactor		LC1K06	LC1K06	LC1K06	LC1K06	LC1K09	LC1K09	LC1K12
Voltage coil		LC1K... ■■ ■■	LP1K... ■■ ■■	LP4K... ■■ ■■				
Breaking capacity Icu/400 V		100 KA	100 KA	100 KA	100 KA	100 KA	100 KA	100 KA
Thermal-magnetic circuit breaker		GV2P06	GV2P07	GV2P08	GV2P10	GV2P14	GV2P14	GV2P16
Breaking capacity Icu/400 V		100 KA	100 KA	100 KA	100 KA	100 KA	100 KA	15 KA
Thermal-magnetic circuit breaker		GV2ME06	GV2ME07	GV2ME08	GV2ME10	GV2ME14	GV2ME14	GV2ME16
Breaking capacity Icu/400 V		100 KA	100 KA	100 KA	100 KA	100 KA	100 KA	15 KA
Magnetic circuit breaker		GV2LE06	GV2LE07	GV2LE08	GV2LE10	GV2LE14	GV2LE14	GV2LE16
Breaking capacity Icu/400 V		100 KA	100 KA	100 KA	100 KA	100 KA	100 KA	100 KA
Magnetic circuit breaker		GV2L06	GV2L07	GV2L08	GV2L10	GV2L14	GV2L14	GV2L16
Switch disconnector fuse		GS1DD	GS1DD	GS1DD	GS1DD	GS1DD	GS1DD	GS1DD
Fuse type		10 x 38	10 x 38	10 x 38	10 x 38	10 x 38	10 x 38	10 x 38
Operational current Ie/400 V		2 A	4 A	4 A	6 A	8 A	12 A	16 A
Thermal overload relay								
c10A		LR2K0306	LR2K0308	LR2K0310	LR2K0312	LR2K0314	LR2K0316	LR2K0321
c120								
Starter controller								
Power base		LUB12	LUB12	LUB12	LUB12	LUB12	LUB12	LUB12
Control unit		LUCA1X	LUCA05	LUCA05	LUCA12	LUCA12	LUCA12	LUCA12

Motor power	0,37...0,55 kW	0,75 kW	1,1...1,5 kW	2,2 kW	3 kW	4 kW	5,5 kW	7,5 kW	9 kW	11 kW	15 kW	18,5 kW	22 kW	30 kW	37 kW	45 kW	55 kW	75 kW	
TeSys D contactor	9 A																		
le max. AC3 (Ue ≤ 440 V)	25 A																		
le AC1 (T < 60°C)	25 A																		
Contactor	LC1D09																		
Voltage coil	LC1D... ■■ ■■																		
Breaking capacity Icu/400 V	100 KA																		
Thermal-magnetic circuit breaker	GV2P06																		
Breaking capacity Icu/400 V	100 KA																		
Thermal-magnetic circuit breaker	GV2ME06																		
Breaking capacity Icu/400 V	100 KA																		
Magnetic circuit breaker	GV2LE06																		
Breaking capacity Icu/400 V	100 KA																		
Magnetic circuit breaker	GV2L06																		
Switch disconnector fuse	GS1DD																		
Fuse type	10 x 38																		
Operational current Ie/400 V	2 A																		
Thermal overload relay	LRD06																		
c10A	LRD06																		
c120	LRD06																		
Starter controller	LUB12																		
Power base	LUCA1X																		
Control unit	LUCA1X																		

Motor power	90 kW	110 kW	132 kW	160 kW	200 kW	250 kW	315 kW	400 kW
TeSys F contactor	185 A							
le max. AC3 (Ue ≤ 440 V)	275 A							
le AC1 (T < 60°C)	275 A							
Contactor	LC1F185							
Voltage coil	LC1F... ■■ ■■							
Breaking capacity Icu/400 V	70 KA							
Thermal-magnetic circuit breaker	GV7RS220							
Breaking capacity Icu/400 V	35 KA							
Thermal-magnetic circuit breaker	GV7RE220							
Breaking capacity Icu/400 V	70 KA							
Magnetic circuit breaker	NSX250HMA							
Breaking capacity Icu/400 V	50 KA							
Magnetic circuit breaker	NSX250NMA							
Switch disconnector fuse	GS2N							
Fuse type	T1							
Operational current Ie/400 V	200 A							
Thermal overload relay	LRD10							
c10A	LRD10							
c120	LRD10							
Starter controller	LUB12							
Power base	LUCA1X							
Control unit	LUCA1X							

Motor power	400 kW	500 kW	630 kW	800 kW	900 kW
TeSys B contactor (3)	800 A				
le max. AC3 (Ue ≤ 440 V)	800 A				
le AC1 (T < 60°C)	800 A				
Contactor	LC1BL33				
Voltage coil	LC1B... ■■ ■■				
Breaking capacity Icu/400 V	70 KA				
Thermal-magnetic circuit breaker	NS800H				
Breaking capacity Icu/400 V	50 KA				
Thermal-magnetic circuit breaker	NS800N				
Breaking capacity Icu/400 V	70 KA				
Magnetic circuit breaker	NSX630H				
Breaking capacity Icu/400 V	50 KA				
Magnetic circuit breaker	NSX630N				
Switch disconnector fuse	GS2V				
Fuse type	T4				
Operational current Ie/400 V	800 A				
Thermal overload relay	LRD10				
c10A	LRD10				
c120	LRD10				
Starter controller	LUB12				
Power base	LUCA1X				
Control unit	LUCA1X				

(1) Micrologic 2.3-M or Micrologic 6.3-M for advanced motor protection  
 (2) Micrologic 5.0 + Plug LR Off  
 (3) For further information, see TeSys B application notes available on: schneider-electric.com.