

DATA SHEET

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GV3P & GV3ME80 MOTOR CIRCUIT BREAKER

Environment										
Circuit-breaker type			GV2 ME	GV2 P	GV3 P	GV3 ME80	GV7 R			
Conforming to standards			IEC 60947-1, 60947-2, 60947-4-1, EN 60204, UL 508, CSA C 22.2 n° 14-05, NF C 63-650, 63-120, 79-130, VDE 0113, 0660		IEC/EN 60947-1, 60947-2, 60947-4-1, UL 508 type E, CSA C 22.2 n° 14-05 type E	IEC/EN, NF EN, BS EN, DIN EN 60947-2, 60947-4-1	IEC 60947-1, 60947-2, 60947-4-1, EN 60947-1, 60947-2, EN 60947-4-1, NF C 63-650, NF C 63-120, 79-130, VDE 0113, 0660			
Product certifications			UL, CSA, CCC, CEBEC, GOST, TSE, BV, GL, LROS, DNV, PTB, EZU, SETI, RINA, ATEX		UL (1), CSA, PTB, EZU, GOST, TSE, DNV, LROS, GL, BV, RINA, CCC, ATEX	UL, CSA, CCC (pending), GOST, ATEX (pending)	UL, CSA, LROS	UL, DNV, CCC		
Protective treatment			"TH"		"TH"	"TC"	"TC"			
Degree of protection	Conforming to IEC 60529	Open mounted	IP 20		IP 20	IP 20	IP 405 with terminal shrouds			
		In enclosure	GV2 M●01: IP 41 GV2 M●02: IP 55	–	GV3 PC01 and GV3 PC02: IP 55	GV3 CE01: IP 55	–			
Shock resistance	Conforming to IEC 60068-2-27	30 gn -11 ms		On: 15 gn -11 ms Off: 30 gn -11 ms		22 gn - 20 ms	15 gn -11 ms			
Vibration resistance	Conforming to IEC 60068-2-6	5 gn (5...150 Hz)		4 gn (5...300 Hz)		2.5 gn (0...25 Hz)	2.5 gn (25 Hz)			
Ambient air temperature	Storage	°C	- 40...+ 80	- 40...+ 80	- 40...+ 80	- 40...+ 80	- 55...+ 95			
	Operation	Open mounted	°C	- 20...+ 60	- 20...+ 60	- 20...+ 60 (2)	- 20...+ 60	- 25...+ 70		
Temperature compensation		In enclosure	°C	- 20...+ 40	- 20...+ 40	- 20...+ 40	- 20...+ 40	–		
		Open mounted	°C	- 20...+ 60	- 20...+ 60	- 20...+ 60	- 20...+ 60	- 25...+ 55 (3)		
Flame resistance	Conforming to IEC 60695-2-1	°C	960	960	960	960	960			
Maximum operating altitude		m	2000		3000	3000	2000			
Suitable for isolation	Conforming to IEC 60947-1 § 7-1-6		Yes		Yes	–	Yes			
Resistance to mechanical impact		J	0.5	0.5	10	0.5	0.5			
			IK 04		IK 09 (in enclosure)	–	–			
Sensitivity to phase failure			Yes, conforming to IEC 60947-4-1 § 7-2-1-5-2							
Technical characteristics										
Circuit-breaker type			GV2 ME	GV2 P	GV2 RT	GV3 P	GV3 ME80	GV7 R●20... R●100	GV7 R●150	GV7 R●220
Utilisation category	Conforming to IEC 60947-2		A			A	A	A		
	Conforming to IEC 60947-4-1		AC-3			AC-3	AC-3	AC-3		
Rated operational voltage (Ue)	Conforming to IEC 60947-2	V	690			690	690	690		
Rated insulation voltage (Ui)	Conforming to IEC 60947-2	V	690			690	690	750		
Rated voltage	Conforming to CSA C22-2 n° 14, UL 508	V	600			600	600 (B600)	600		
Rated operational frequency	Conforming to IEC 60947-4-1 UL, CSA	Hz	50/60			50/60	50/60	50/60		
Rated impulse withstand voltage (U imp)	Conforming to IEC 60947-2	kV	6			6	6	8		
Total power dissipated per pole		W	2.5			8	8	5	8.7	14.5
Mechanical durability (C.O.: Close, Open)		C.O.	100 000			50 000	30 000	50 000	40 000	20 000
Electrical durability for AC-3 duty	440 V In/2	C.O.	100 000			–	30 000	50 000	40 000	20 000
	440 V In	C.O.	–			50 000	–	30 000	20 000	10 000
Duty class (maximum operating rate)		C.O./h	25			25	25	25		
Maximum conventional rated thermal current (Ith)	Conforming to IEC 60947-4-1	A	0.16... 32	0.16... 32	0.40... 23	13... 65	80	12... 100	150	220
Rated duty	Conforming to IEC 60947-4-1		Continuous duty							

(1) UL 508 type E for GV2 P●●H7

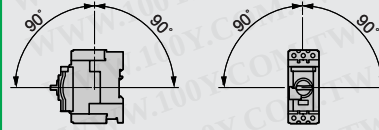
(2) Leave a space of 9 mm between 2 circuit-breakers: either an empty space, or side mounting add-on contact blocks. Side by side mounting is possible up to 40 °C.

(3) For operation up to 70 °C, please consult your Regional Sales Office.

Mounting characteristics

Operating position

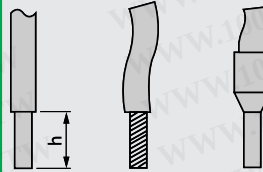
Without derating, in relation to normal vertical mounting plane (1)



Connection characteristics

Connection to screw clamp terminals or spring terminals

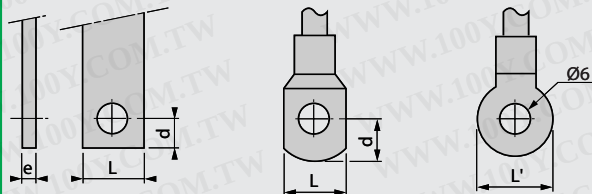
Bare cables



Circuit-breaker type			GV2 ME		GV2 P		GV3 P		GV3 ME80	
Connection to screw clamp terminals (2) (Max. number of conductors x c.s.a.)			Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
	Solid cable	mm ²	2 x 1	2 x 6	2 x 1	2 x 6	2 x 1	1 x 25 and 1 x 35	1 x 2.5	1 x 35
	Flexible cable without cable end	mm ²	2 x 1.5	2 x 6	2 x 1.5	2 x 6	2 x 1	1 x 25 and 1 x 35	1 x 2.5	2 x 16
	Flexible cable with cable end	mm ²	2 x 1	2 x 4	2 x 1	2 x 4	2 x 1	1 x 25 and 1 x 35	1 x 2.5	2 x 16
Tightening torque		N.m	1.7	1.7	1.7	1.7	5	5: 25 mm ² 8: 35 mm ²	5	5
Connection to spring terminals										
Number of conductors x c.s.a.										
	Solid cable	mm ²	2 x 1 (3)	2 x 6	—	—	—	—	—	—
	Flexible cable without cable end	mm ²	2 x 1.5 (3)	2 x 4	—	—	—	—	—	—

Connection by bars or lugs

Bars or lugs



Circuit-breaker type			GV2 ME●●6	GV3 P●●6	GV7 R●20...R●100	GV7 R●150	GV7 R●220
Pitch	Without spreaders	mm	13.5	17.5	35	35	35
	With spreaders	mm	—	—	45	45	45
Bars or cables with lugs	e	mm	≤ 6	≤ 6	≤ 6	≤ 6	≤ 6
	L	mm	≤ 9.5	≤ 13.5	≤ 25	≤ 25	≤ 25
	L'	mm	≤ 9.5	≤ 16.5	—	—	—
	d	mm	≤ 10	≤ 10	≤ 10	≤ 10	≤ 10
Screws			M4	M6	M6	M8	M8
	Tightening torque	N.m	1.7	6	10	15	15
Bare cables (copper or aluminium) with connectors	Height (h)	mm	—	—	20	20	20
	C.s.a.	mm ²	—	—	1.5...95	1.5...95	1.5...185
	Tightening torque	N.m	—	—	15	15	15

(1) When mounting on a vertical rail, fit a stop to prevent any slippage.

(2) For motor circuit-breakers GV3 P: BTR hexagon socket head screws, EverLink® system.

Require use of an insulated Allen key, in compliance with local electrical wiring regulations.

(3) For cross-sections 1 to 1.5 mm², the use of an LA9 D99 cable end reducer is recommended.

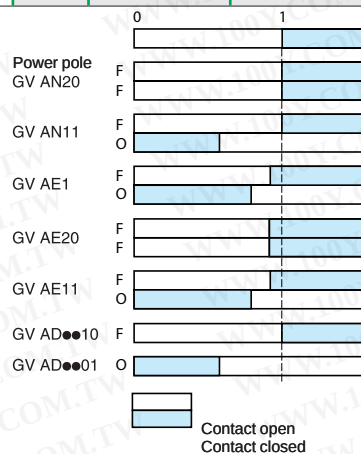
Breaking capacity of GV3 P and GV3 ME80

Motor circuit-breaker type				GV3 P							GV3 ME80
				13	18	25	32	40	50	65	
Rating			A	13	18	25	32	40	50	65	80
Breaking capacity conforming to IEC 60947-2	230/240 V	Icu	kA	100	100	100	100	100	100	100	100
		Ics % (1)		100	100	100	100	100	100	100	100
	400/415 V	Icu	kA	100	100	100	100	50	50	50	15
		Ics % (1)		100	100	100	100	100	100	100	50
	440 V	Icu	kA	50	50	50	50	50	50	50	10
		Ics % (1)		100	100	100	100	100	100	100	60
	500 V	Icu	kA	12	12	12	12	12	12	12	4
		Ics % (1)		50	50	50	50	50	50	50	100
	690 V	Icu	kA	6	6	6	6	6	6	6	2
		Ics % (1)		50	50	50	50	50	50	50	100
Associated fuses, if required if Isc > breaking capacity Icu	230/240 V	aM	A	★	★	★	★	★	★	★	★
		gG	A	★	★	★	★	★	★	★	★
	415 V	aM	A	★	★	★	★	125	125	125	315
		gG	A	★	★	★	★	160	160	160	400
	440 V	aM	A	63	80	125	125	125	125	125	315
		gG	A	80	100	160	160	160	160	160	400
	500 V	aM	A	63	63	63	63	80	80	80	200
		gG	A	80	80	80	80	100	100	100	250
	690 V	aM	A	50	50	50	50	63	63	63	200
		gG	A	63	63	63	63	80	80	80	250

★ Fuse not required: breaking capacity Icn > Isc.
(1) As % of Icu.

Type of contacts			Instantaneous auxiliary GV AN, GV AD							Fault signalling GV AD, GV AM11 (1)				Instantaneous auxiliary GV AE				
Rated insulation voltage (Ui) (associated insulation coordination)	Conforming to IEC 60947-1	V	690							690				250 (690 in relation to main circuit)				
	Conforming to CSA C22-2 n° 14 and UL 508	V	600							300				300				
Conventional thermal current (Ith)	Conforming to IEC 60947-5-1	A	6							2.5				2.5				
	Conforming to CSA C22-2 n° 14 and UL 508	A	5							1				1				
Mechanical durability (C.O.: Close - Open)		C.O.	100 000							1000				100 000				
Operational power and current conforming to IEC 60947-5-1. a.c. operation			AC-15/100 000 C.O.							AC-14/1000 C.O.				AC-15/100 000 C.O.				
	Rated operational voltage (Ue)	V	48	110 127	230 240	380 415	440	500	690	24	48	110 127	230 240	24	48	110 127	230 240	
	Operational power, normal conditions	VA	300	500	720	850	650	500	400	36	48	72	72	48	60	120	120	
	Occasional breaking and making capacities, abnormal conditions	kVA	3	7	13	15	13	12	9	0.22	0.3	0.45	0.45	0.48	0.6	1.27	2.4	
	Rated operational current (Ie)	A	6	4.5	3.3	2.2	1.5	1	0.6	1.5	1	0.5	0.3	2	1.25	1	0.5	
Operational power and current conforming to IEC 60947-5-1. d.c. operation			DC-13/100 000 C.O.							DC-13/1000 C.O.				DC-13/100 000 C.O.				
	Rated operational voltage (Ue)	V	24	48	60	110	240 (2)	–	–	24	48	60	–	24	48	60	–	
	Operational power, normal conditions	W	140	240	180	140	120	–	–	24	15	9	–	24	15	9	–	
	Occasional breaking and making capacities, abnormal conditions	W	240	360	240	210	180	–	–	100	50	50	–	100	50	50	–	
	Rated operational current (Ie)	A	6	5	3	1.3	0.5	–	–	1	0.3	0.15	–	1	0.3	0.15	–	
Low power switching reliability of contact			GV AE: Number of failures for “n” million operating cycles (17 V-5 mA): = 10 ⁻⁶															
Minimum operational conditions d.c. operation		V	17															
		mA	5															
Short-circuit protection			By GB2 CB●● circuit-breaker (rating according to operational current for Ue ≤ 415 V) or by gG fuse 10 A max											GB2 CB06 or gG fuse 10 A max				
Cabling, screw clamp terminals			1				2											
			1...2.5				1...2.5											
			0.75...2.5				0.75...2.5											
			0.75...1.5				0.75...1.5											
			1.4 max				1.4 max											
Cabling, spring terminal connections			GV AN only															
		Flexible cable without cable end	mm ²	0.75...2.5				0.75...2.5				–				0.75...1.5		
Operation of instantaneous auxiliary contacts			0				1				Operation of fault signalling contacts							

Operation of instantaneous auxiliary contacts



Operation of fault signalling contacts

GV AM11

Change of state following tripping on
short-circuit.

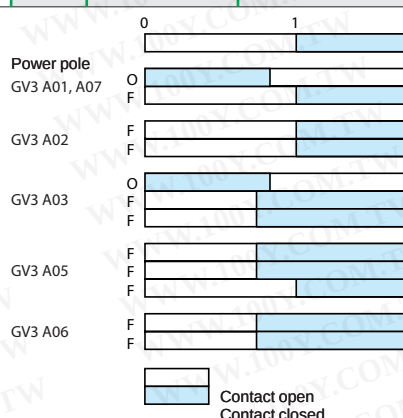
GV AD10●● and GV AD01●●

Change of state following tripping on
short-circuit, overload or undervoltage.

(1) For application example of fault signalling contact and short-circuit signalling contact.
 (2) Add an RC circuit type LA4 D to the load terminals.

Type of contacts			Instantaneous auxiliary contacts GV3 A01...A07							Fault signalling contacts GV3 A08 and A09						
Rated insulation voltage (Ui)	Conforming to IEC 60947-1	V	690							690						
	Conforming to CSA C22-2 n° 14, UL 508	V	600 (B600)							600 (B600)						
Conventional rated thermal current (Ith)	Conforming to IEC 60947-5-1	A	6							6						
	Conforming to CSA C22-2 n° 14, UL 508	A	5 (B600)							5 (B600)						
Mechanical durability (C.O.: Close - Open)		C.O.	100 000							1000						
Operational power and current conforming to IEC 60947-5-1 a.c. operation	Rated operational voltage (Ue)	V	48	110 127	220 240	380 415	440	500	690	48	110 127	220 240	380 415	440	500	690
	Operational power		AC-11/100 000 C.O.							AC-11/1000 C.O.						
		VA	350	500	800	850	700	700	400	240	460	800	850	450	450	200
	Occasional breaking and making capacities	kVA	4	12	20	20	15	15	10	2.4	8	12	15	12	12	8
	Operational current (Ie)	A	6	4.5	3.5	2.2	1.5	1.5	0.6	5	3.6	3.5	2.2	1	1	0.3
Operational power and current conforming to IEC 60947-5-1 d.c. operation	Rated operational voltage (Ue)	V	24	48	60	110	220			24	48	60	110	220		
	Operational power		DC-11/100 000 C.O.							DC-11/1000 C.O.						
		W	180	240	180	140	120			120	120	90	70	60		
	Occasional breaking and making capacities	W	240	360	240	210	180			180	180	135	105	90		
	Operational current (Ie)	A	6	5	3	1.3	0.5			5	2.5	1.5	0.7	0.3		
Short-circuit protection			By GB2 CB08 circuit-breaker or gG fuse, 6A max													
Connection	Number of conductors		1	2												
	Solid cable	mm ²	1...2.5	1...2.5												
	Flexible cable without cable end	mm ²	0.75...2.5	0.75...2.5												
	Flexible cable with cable end	mm ²	0.75...2.5	0.75...1.5												

Contact operation



GV3 A08 and A09 change state following tripping on short-circuit or overload

Characteristics of electric trips									
Circuit-breaker type			GV2 ME, GV2 P GV3 P, GV3 L		GV2 ME only	GV3 ME80		GV7 R	
Type of trip			GV AU	GV AS	GV AX (1)	GV3 B	GV3 D	GV7 AU	GV7 AS
Rated insulation voltage (Ui)	Conforming to IEC 60947-1	V	690	690	500	690	690	690	690
	Conforming to CSA C22-2 n° 14, UL 508	V	600	600	–	600 (B600)	600 (B600)	600	600
Operational voltage	Conforming to IEC 60947-1	V	0.85... 1.1 Un	0.7... 1.1 Un	0.85... 1.1 Un	0.8...1.1 Un		0.85... 1.1 Un	0.7... 1.1 Un
Drop-out voltage		V	0.7... 0.35 Un	0.75... 0.2 Un	0.7... 0.35 Un	0.7...0.35 Un		0.35... 0.7 Ue	0.2... 0.75 Ue
Inrush consumption	~	VA	12	14	12	12		< 10	
	≡	W	8	10.5	8	7		< 5	
Sealed consumption	~	VA	3.5	5	3.5	7		< 5	
	≡	W	1.1	1.6	1.1	2.5		< 5	
Operating time	Conforming to IEC 60947-1	ms	From the moment the voltage reaches its operational value until opening of the circuit-breaker. 10...15				10	15	< 50
On-load factor			100 %				100 %		100 %
Cabling	Number of conductors		2 or 4				1 or 2		1
	Solid cable	mm ²	1...2.5				1...2.5		1.5
	Flexible cable without cable end	mm ²	0.75...2.5				0.75...2.5		1.5
	Flexible cable with cable end	mm ²	0.75...1.5				0.75...2.5		1
Tightening torque		N.m	1.4 max				1.2		1.2
Mechanical durability (C.O.: Close - Open)		C.O.	30 000 (GV2 ME and GV2 P) 10 000 (GV3 P and GV3 L)				50 % of the mechanical durability of the circuit-breaker		

(1) Wiring scheme of undervoltage trip for dangerous machines (conforming to INRS) on **GV2 ME** only.

Characteristics of 3-pole busbars GV2 G●●● and GV3 G●64

			GV2 G●●●	GV3 G●64
Rated insulation voltage (Ui)	Conforming to IEC 60947-1	V	690	690
Conventional thermal current (Ith)	Conforming to IEC 60439-1	A	63	115
Permissible peak current (I peak)		kA	11	20
Permissible thermal limit (I²t)		kA²s	104	300
Degree of protection	Conforming to IEC 60529		IP 20	IP 20
Terminal block			Yes	—

Characteristics of terminal blocks GV2 G05 and GV1 G09 (for GV2 ME and GV2 P)

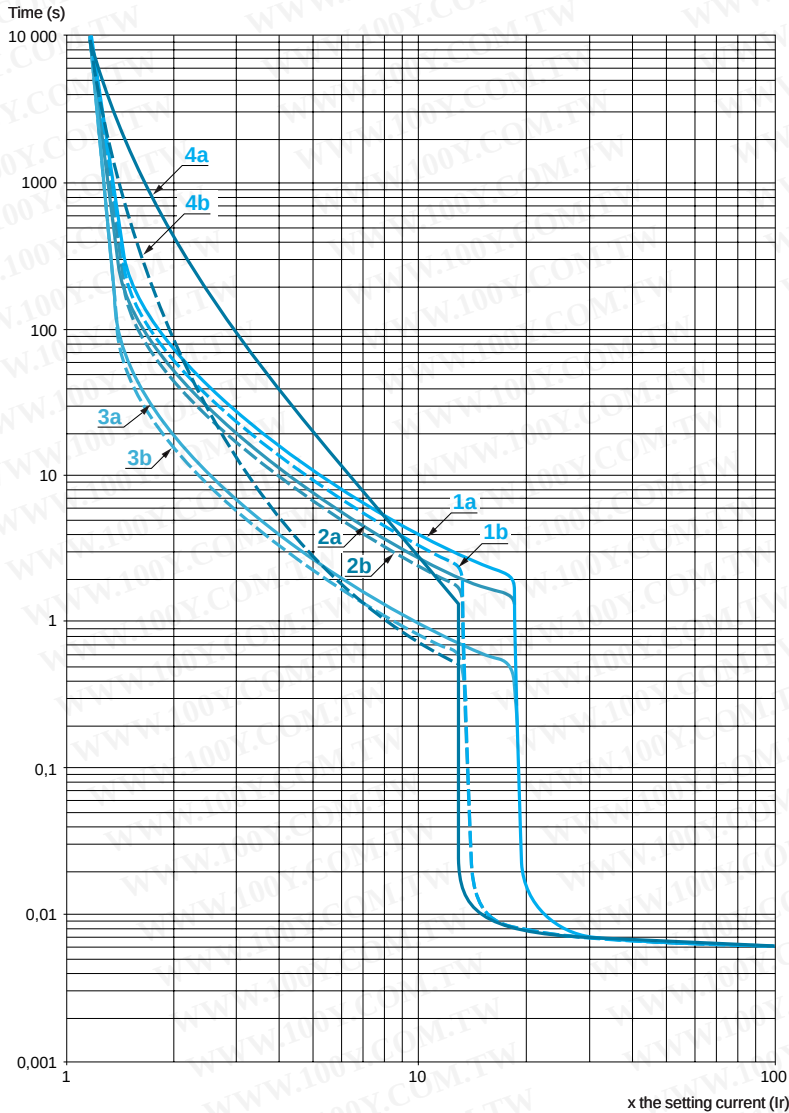
Rated insulation voltage (Ui)	Conforming to IEC 60947-1	V	690
Conventional thermal current (Ith)	Conforming to IEC 60439-1	A	63
Degree of protection	Conforming to IEC 60529		IP 20
Connection	Solid cable	mm²	1 x 1.5 to 25 conductor or 2 x 1.5 to 6 conductors
	Flexible cable without cable end	mm²	1 x 1.5 to 16 conductor or 2 x 2.5 to 4 conductors
	Flexible cable with cable end	mm²	1 x 1.5 to 10 conductor or 2 x 1.5 to 2 conductors
	Flexible or solid cable AWG		1 AWG 4
Tightening torque	Connector	N.m	2.2
	Screw clamp terminals	N.m	1.7

Characteristics of current limiters (GV2 ME and GV2 P)

Type			GV1 L3	LA9 LB920	
Rated insulation voltage (Ui)	Conforming to IEC 60947-1	V	690	690	
Conventional thermal current (Ith)	Conforming to IEC 60947-1	A	63	63	
Operating threshold	rms current	A	1500 (non adjustable threshold)	1000 (non adjustable threshold)	
Connection			1 conductor	2 conductors	
	Solid cable	mm²	1.5...25	1.5...10	1.5...25
	Flexible cable without cable end	mm²	1.5...25	2.5...10	1.5...25
	Flexible cable with cable end	mm²	1.5...16	1.5... 4	1.5...16
Tightening torque		N.m	2.2		

Thermal-magnetic tripping curves

Average operating times at 20 °C related to multiples of the setting current



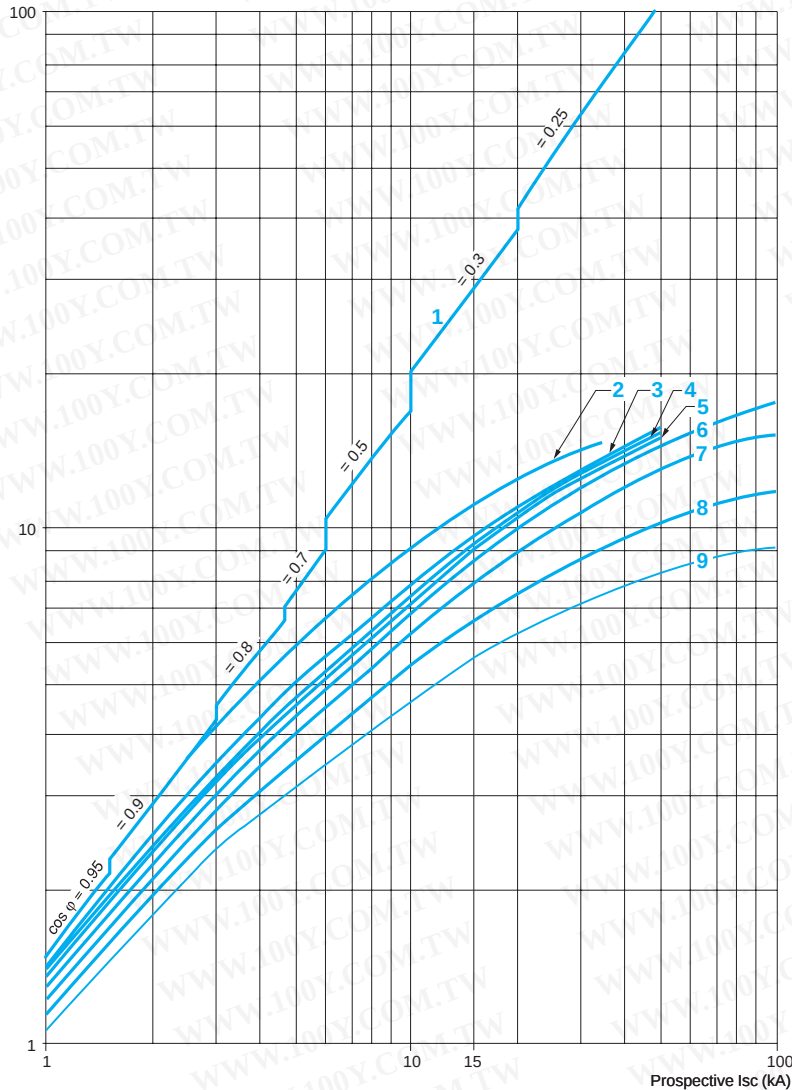
- 1a** 3 poles from cold state (Ir mini.) : GV3 P
- 1b** 3 poles from cold state (Ir maxi.) : GV3 P
- 2a** 2 poles from cold state (Ir mini.) : GV3 P
- 2b** 2 poles from cold state (Ir maxi.) : GV3 P
- 3a** 3 poles from hot state (Ir mini.) : GV3 P
- 3b** 3 poles from hot state (Ir maxi.) : GV3 P
- 4a** 3 poles from hot state (Ir mini.) : GV3 ME80
- 4b** 3 poles from hot state (Ir maxi.) : GV3 ME80

Current limitation on short-circuit (3-phase 400/415 V)

Dynamic stress

$I_{peak} = f(\text{prospective } I_{sc}) \text{ at } 1.05 U_e = 435 \text{ V}$

Limited peak current (kA)

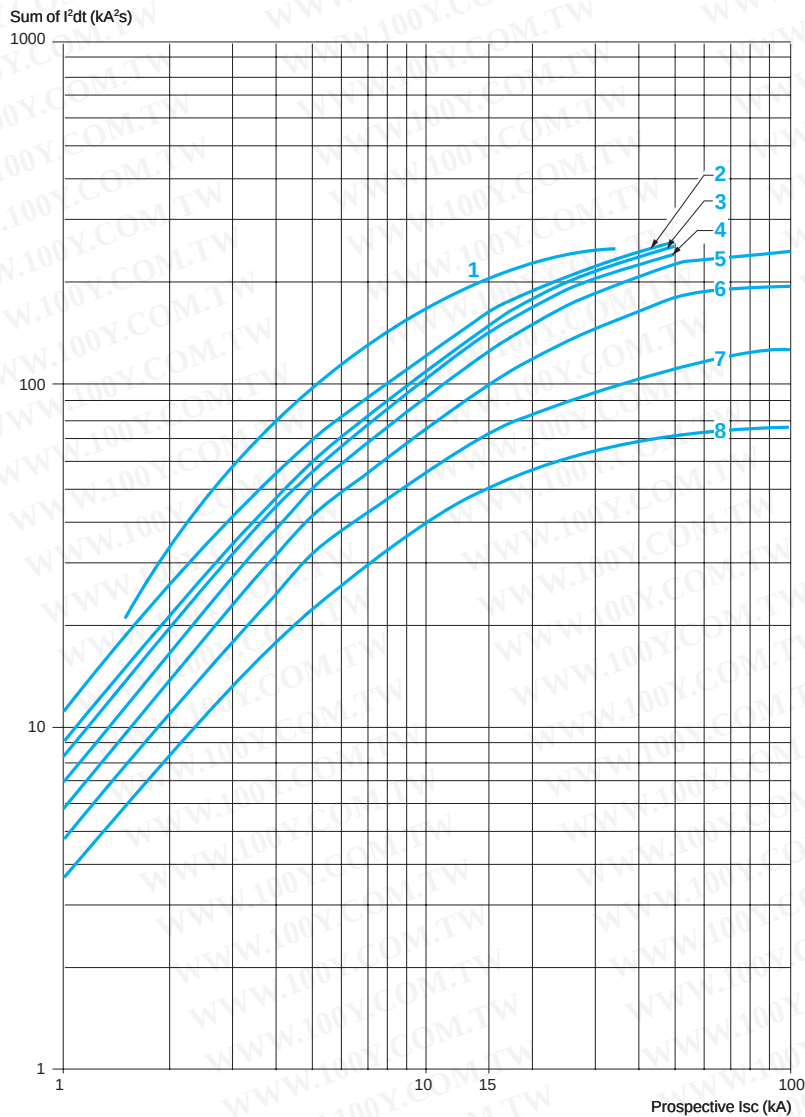


- 1 Maximum peak current
- 2 56-80 A (GV3 ME80)
- 3 48-65 A (GV3 P65)
- 4 37-50 A (GV3 P50)
- 5 30-40 A (GV3 P40)
- 6 23-32 A (GV3 P32)
- 7 17-25 A (GV3 P25)
- 8 12-18 A (GV3 P18)
- 9 9-13 A (GV3 P13)

Maximum thermal limit on short-circuit

Thermal limit in kA²s in the magnetic operating zone

Sum of $I^2dt = f$ (prospective I_{sc}) at $1.05 U_e = 435 V$



- 1 56-80 A (GV3 ME80)
- 2 48-65 A (GV3 P65)
- 3 37-50 A (GV3 P50)
- 4 30-40 A (GV3 P40)
- 5 23-32 A (GV3 P32)
- 6 17-25 A (GV3 P25)
- 7 12-18 A (GV3 P18)
- 8 9-13 A (GV3 P13)

TeSys protection components

Thermal-magnetic motor circuit-breakers

GV2 P, GV3 P and GV3 ME80

Schneider
Electric



GV2 P10



GV3 P65



GV3 P651

Motor circuit-breakers from 0.06 to 30 kW / 400 V

Standard power ratings of 3-phase motors

50/60 Hz in category AC-3

400/415 V			500 V			690 V			Setting range of thermal trips (2)	Magnetic tripping current I _d ± 20 %	Reference	Weight
P	Icu	Ics (1)	P	Icu	Ics (1)	P	Icu	Ics (1)				
kW	kA	%	kW	kA	%	kW	kA	%	A	A		kg

GV2 P: control by rotary knob

Screw clamp terminals

—	—	—	—	—	—	—	—	—	0.1...0.16	1.5	GV2 P01	0.350
0.06	★	★	—	—	—	—	—	—	0.16...0.25	2.4	GV2 P02	0.350
0.09	★	★	—	—	—	—	—	—	0.25...0.40	5	GV2 P03	0.350
0.12	★	★	—	—	—	0.37	★	★	0.40...0.63	8	GV2 P04	0.350
0.18	★	★	—	—	—	—	—	—	—	—	—	—
0.25	★	★	—	—	—	0.55	★	★	0.63...1	13	GV2 P05	0.350
0.37	★	★	0.37	★	★	—	—	—	1...1.6	22.5	GV2 P06	0.350
0.55	★	★	0.55	★	★	0.75	★	★	—	—	—	—
0.75	★	★	1.1	★	★	1.5	8	100	1.6...2.5	33.5	GV2 P07	0.350
1.1	★	★	1.5	★	★	2.2	8	100	2.5...4	51	GV2 P08	0.350
2.2	★	★	3	★	★	4	6	100	4...6.3	78	GV2 P10	0.350
3	★	★	5	50	100	5.5	6	100	6...10	138	GV2 P14	0.350
5.5	★	★	7.5	42	75	9	6	100	9...14	170	GV2 P16	0.350
—	—	—	—	—	—	11	6	100	—	—	—	—
7.5	50	50	9	10	75	15	4	100	13...18	223	GV2 P20	0.350
9	50	50	11	10	75	18.5	4	100	17...23	327	GV2 P21	0.350
11	50	50	15	10	75	—	—	—	20...25	327	GV2 P22	0.350
15	35	50	18.5	10	75	22	4	100	24...32	416	GV2 P32	0.350

GV3 P: control by rotary knob

Connection by EverLink® BTR screw connectors (3)

5.5	100	100	7.5	12	50	11	6	50	9...13	182	GV3 P13	0.960
7.5	100	100	9	12	50	15	6	50	12...18	252	GV3 P18	0.960
11	100	100	15	12	50	18.5	6	50	17...25	350	GV3 P25	0.960
15	100	100	18.5	12	50	22	6	50	23...32	448	GV3 P32	0.960
18.5	50	100	22	12	50	37	6	50	30...40	560	GV3 P40	0.960
22	50	100	30	12	50	45	6	50	37...50	700	GV3 P50	0.960
30	50	100	45	12	50	55	6	50	48...65	910	GV3 P65	0.960

Connection by EverLink® BTR screw connectors, for assembly with a contactor

To assemble a GV3 P40 to P65 circuit-breaker with an LC1 D40A to D65A contactor, it is possible to use the circuit-breaker supplied without downstream EverLink® power terminal block. To order this product, add the digit 1 to the end of the references selected above. Example: GV3 P65 becomes GV3 P651.

Connection by lugs

To order thermal magnetic circuit-breakers with connection by lugs, add the digit 6 to the end of reference selected above. Example: GV3 P18 becomes GV3 P186.

GV3 ME80: pushbutton control, screw clamp terminals

37	15	50	45	4	100	55	2	100	56...80		GV3 ME80 (4)	0.700
----	----	----	----	---	-----	----	---	-----	---------	--	--------------	-------

Motor circuit-breakers up to 50 hp / 600 V, UL 508 type E

GV2 (5)

To obtain a GV2 P motor circuit-breaker, UL 508 type E, combine:

- a circuit-breaker GV2 P●●H7 (except 32 A),
- and a "Large Spacing" adapter GV2 GH7.

GV3 (6)

To obtain a motor-circuit-breaker GV3 P, UL 508 type E, use the following with the circuit-breaker:

- a "Large Spacing" cover GV3 G66,
- a short-circuit signalling contact GV AM11.

GV3 with connection by lugs (6)

To obtain a motor-circuit-breaker GV3 P, UL 508 type E, with connection by lugs, add the digit 6 to the end of reference selected above and use the following with the circuit-breaker:

- two IP 20 covers LAD 96570,
- a short-circuit signalling contact GV AM11.

(1) As % of Icu.

(2) The thermal trip setting must be within the range marked on the graduated knob.

(3) BTR screws: hexagon socket head. Require use of an insulated Allen key, in compliance with local wiring regulations.

(4) Recommended for use in association with a contactor.

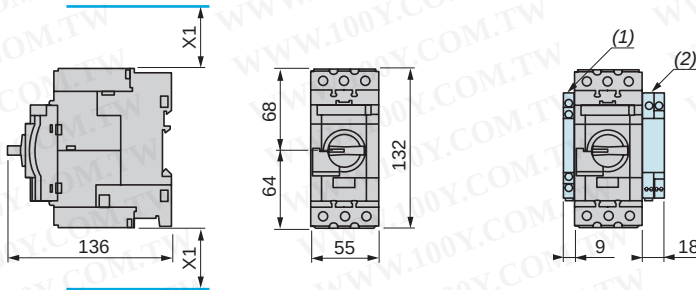
(5) Accessory.

(6) Accessories.

★ > 100 kA.

GV3 P

Dimensions



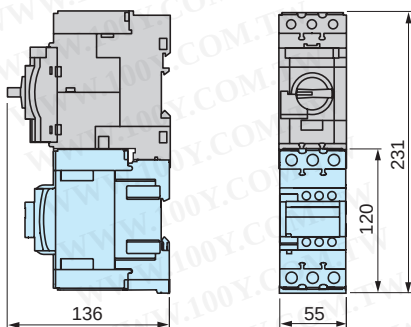
X1 = Electrical clearance (ISC max)
40 mm for $U_e \leq 500$ V, 50 mm for $U_e \leq 690$ V

(1) Blocks GV AN●●, GV AD●● and GV AM11
(2) Blocks GV3 AU●● and GV3 AS●●

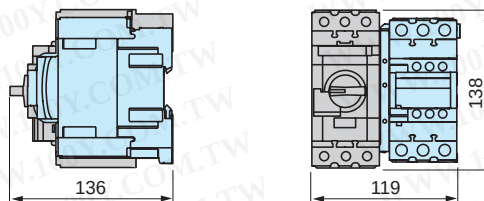
Note: Leave a gap of 9 mm between 2 circuit-breakers: either an empty space or side-mounting add-on contact blocks.
Horizontal mounting is possible up to 40 °C

Mounting

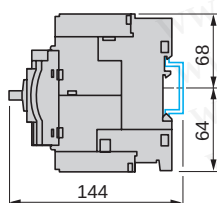
Mounting with TeSys contactor LC1 D40A...D65A



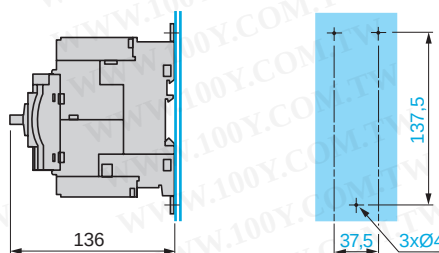
Side by side mounting with TeSys contactor LC1 D40A...D65A (S-shape busbar system GV3 S)



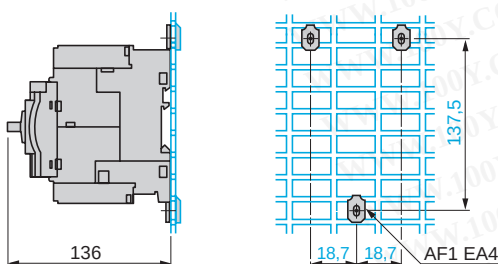
Mounting on rail AM1 DE200 or AM1 ED201



Panel mounting, using M4 screws



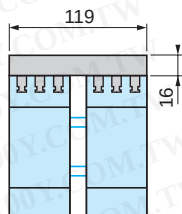
Mounting on pre-slotted plate AM1 PA



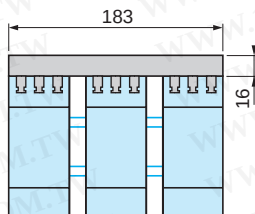
GV3 P (continued)

Busbar systems

Set of busbars GV3 G264



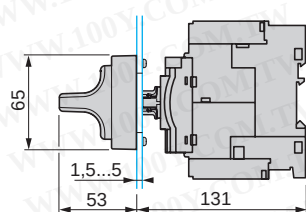
Set of busbars GV3 G364



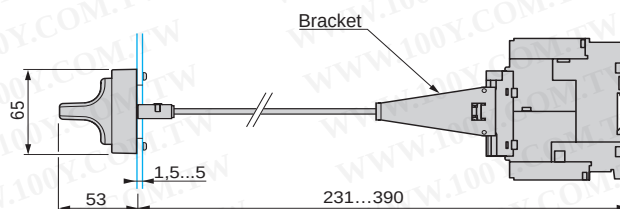
Note: Leave a space of 9 mm between 2 circuit-breakers: either an empty space or side-mounting add-on contact blocks.
Horizontal mounting is possible up to 40 °C.

Mounting of external operator GV3 AP01 or GV3 AP02

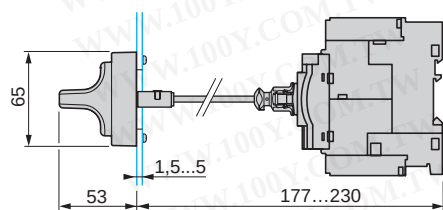
Depth 131 mm



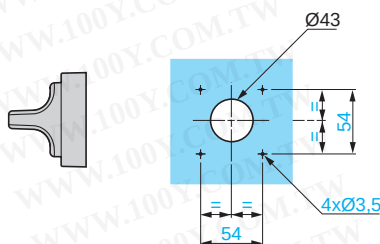
Depth 231 to 390 mm



Depth 177 to 230 mm

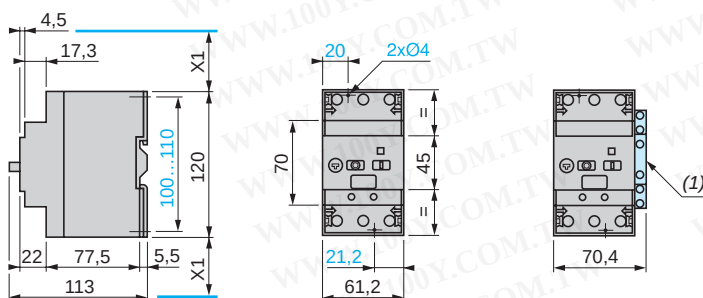


Door cut-out



GV3 ME80

Dimensions

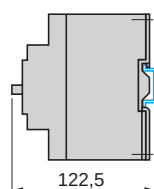


X1 = Electrical clearance (ISC max)
40 mm for $U_e \leq 500$ V, 50 mm for $U_e \leq 690$ V

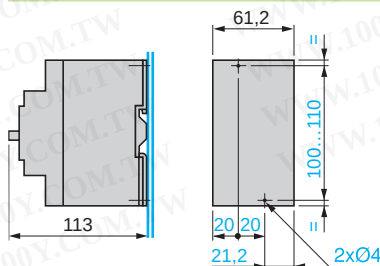
(1) Blocks GV3 A01...A07.

Mounting

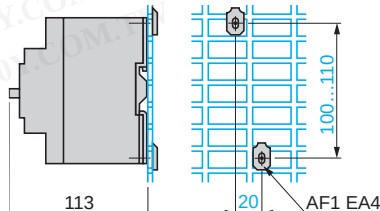
Mounting on rail AM1 DE200 or AM1 ED201



Panel mounting, using M4 screws

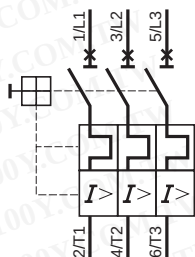


Mounting on pre-slotted plate AM1 PA

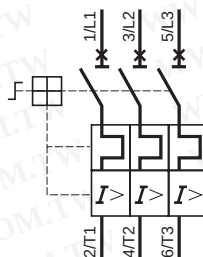


Schemes

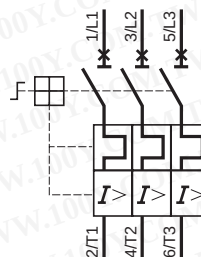
GV2 ME●● and GV2 RT



GV2 P●●



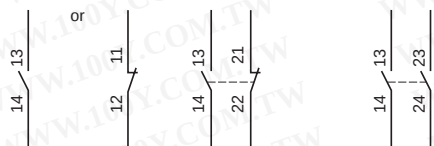
GV3 P●●

Front mounting add-on contact blocks
Instantaneous auxiliary contacts

GV AE1

GV AE11

GV AE20

Front mounting add-on contact blocks
Instantaneous auxiliary contacts and fault signalling contacts

GV AED101

GV AED011



Side mounting add-on contact blocks

Instantaneous auxiliary contacts and fault signalling contacts

GV AD0110

GV AD0101

GV AD1010

GV AD1001



Instantaneous auxiliary contacts

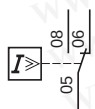
GV AN11

GV AN20



Short-circuit signalling contacts

GV AM11

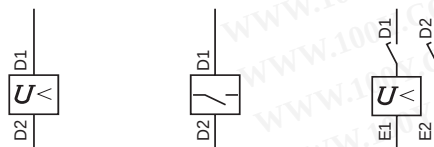


Voltage trips

GV AU●●●

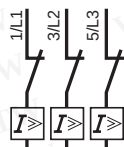
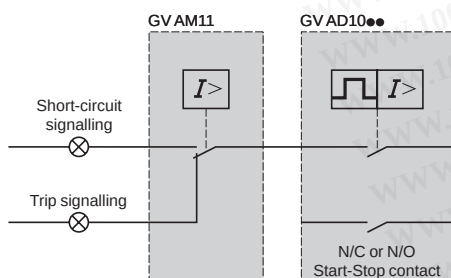
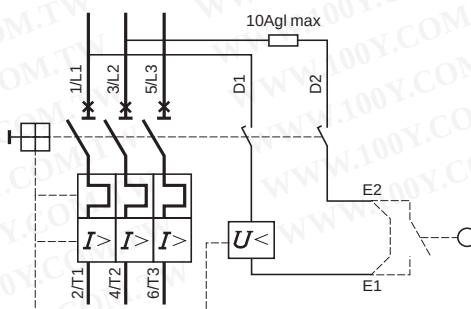
GV AS●●●

GV AX●●●



Current limiter

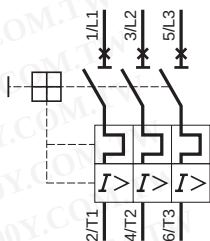
GV1 L3

Use of fault signalling contact
and short-circuit signalling contactConnection of undervoltage trip for dangerous machines
(conforming to INRS) on GV2 ME only

Schemes

Motor circuit-breakers

GV3 ME80



Auxiliary contact block modules

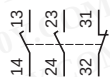
GV3 A01



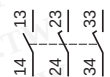
GV3 A02



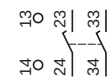
GV3 A03



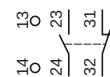
GV3 A05



GV3 A06

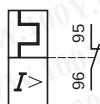


GV3 A07

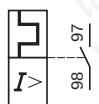


Fault signalling contacts

GV3 A08



GV3 A09

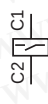


Voltage trips

GV3 B

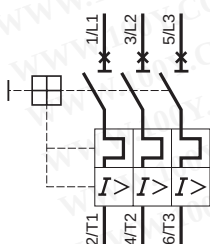


GV3 D



Motor circuit-breakers

GV7 R



Add-on auxiliary contacts according to their location (1)

GV7 AE11, GV7 AB11

Location 1
C/O contactLocation 2
Trip indicationLocation 3
Electrical fault
indicationLocation 4
C/O contact

A self-adhesive label, supplied with the contact, can be affixed to the front face of the circuit-breaker to allow personalised marking according to the function of the contact or contacts.
 (1) See pages 48 and 91.

Electric trips

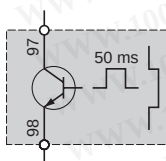
GV7 AU...



GV7 AS...

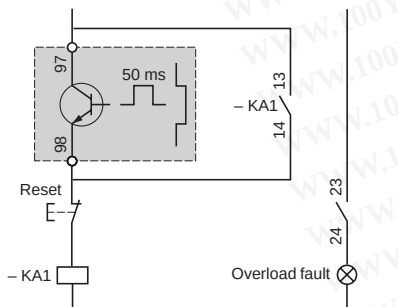


GV7 AD111, AD112



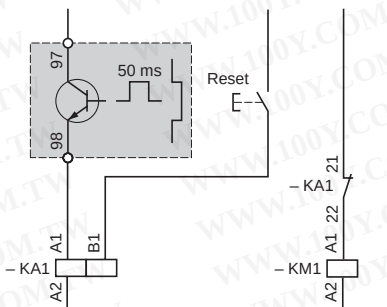
Recommended application schemes GV7 AD111, AD112

Fault indication



Associated components
 KA1: CA2 KN or CAD N

Contactor opening on overload



Associated components
 KA1: CAD + LAD 6K10 or RHK
 KM1: LC1 D or LC1 F