

TeSys Control

Deca circuit breakers ref. GV2ME, undervoltage trips

Product references

Enclosed starters

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GV2ME●●

Thermal magnetic circuit breakers, with screw clamp terminals

GV2ME with pushbutton control

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
P	I _{cu}	I _{cs} ⁽¹⁾	P	I _{cu}	I _{cs} ⁽¹⁾	P	I _{cu}	I _{cs} ⁽¹⁾			
kW	kA	%	kW	kA	%	kW	kA	%	A	A	
–	–	–	–	–	–	–	–	–	0.1...0.16	1.5	GV2ME01
0.06	★	★	–	–	–	–	–	–	0.16...0.25	2.4	GV2ME02
0.09	★	★	–	–	–	–	–	–	0.25...0.40	5	GV2ME03
0.12	★	★	–	–	–	0.37	★	★	0.40...0.63	8	GV2ME04
0.18	★	★	–	–	–	–	–	–			
0.25	★	★	–	–	–	0.55	★	★	0.63...1	13	GV2ME05
0.37	★	★	0.37	★	★	–	–	–	1...1.6	22.5	GV2ME06
0.55	★	★	0.55	★	★	0.75	★	★			
–	–	–	0.75	★	★	1.1	★	★	1.6...2.5	33.5	GV2ME07
0.75	★	★	1.1	★	★	1.5	3	75			
1.1	★	★	1.5	★	★	2.2	3	75	2.5...4	51	GV2ME08
1.5	★	★	2.2	★	★	3	3	75			
2.2	★	★	3	50	100	4	3	75	4...6.3	78	GV2ME10
3	★	★	4	10	100	5.5	3	75	6...10	138	GV2ME14
4	★	★	5.5	10	100	7.5	3	75			
5.5	15	50	7.5	6	75	9	3	75	9...14	170	GV2ME16
–	–	–	–	–	–	11	3	75			
7.5	15	50	9	6	75	15	3	75	13...18	223	GV2ME20
9	15	40	11	4	75	18.5	3	75	17...23	327	GV2ME21
11	15	40	15	4	75	–	–	–	20...25	327	GV2ME22 ⁽³⁾

GV2ME technical characteristics: see in chapter B6.

Undervoltage trip, INRS (can only be mounted on GV2ME)

Safety device for dangerous machines conforming to INRS and VDE0113

Side (1 block on RH side of circuit breaker GV2 ME)	Voltage	Frequency	Reference
	110...115 V	50 Hz	GVAX115
		60 Hz	GVAX116
	127 V	60 Hz	GVAX115
	220...240 V	50 Hz	GVAX225
		60 Hz	GVAX226
	380...400 V	50 Hz	GVAX385
		60 Hz	GVAX386
	415...440 V	50 Hz	GVAX415
	440 V	60 Hz	GVAX385

GVAX technical characteristics: see in chapter B6.

(1) As % of I_{cu}.

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

(3) Maximum rating which can be mounted in enclosures GV2MC or MP, please consult your Regional Sales Office.

★ > 100 kA.

PB121677.eps



GVAX●●●

TeSys Control

Direct-on-line starters - with overload protection - up to 15 kW

Product references

D.O.L. starters, non-reversing, from 0.06 to 15 kW at 400/415 V, type 1 coordination

This pre-assembled combination comprises:

- 1 motor circuit breaker GV2ME,
- 1 3-pole contactor LC1D,
- 1 combination block GV2AF3.

Characteristics

Starter type	GV2	DM102 to DM110	DM114	DM116	DM132		
Breaking capacity (I _q) ⁽¹⁾	Conforming to IEC 60947-4-1	400/415 V	kA	50	50	15	10
		440 V	kA	50	15	8	6
		500 V	kA	50	6	6	4

References

D.O.L. starters, non-reversing

Standard power ratings of 3-phase motors 50/60 Hz in AC-3			Setting range of thermal trips	Fixed magnetic tripping current 13 Irth	For customer assembly		Pre-assembled	Weight
400/415 V	440 V	500 V			Motor circuit-breaker Reference	Contactor Reference to be completed ⁽²⁾		
kW	kW	kW	A	A				kg
0.06	0.06	–	0.16...0.25	2.4	GV2ME02	LC1D09●●	GV2DM102●● ⁽⁴⁾	0.596
0.75	0.75	–	1.6...2.5	33.5	GV2ME07	LC1D09●●	GV2DM107●● ⁽⁴⁾	0.596
–	1.1	1.1						
1.1	–	1.5	2.5...4	51	GV2ME08	LC1D09●●	GV2DM108●● ⁽⁴⁾	0.596
1.5	1.5	2.2						
2.2	2.2	–	4...6.3	78	GV2ME10	LC1D09●●	GV2DM110●● ⁽⁴⁾	0.596
–	3	3						
3	–	4	6...10	138	GV2ME14	LC1D09●●	GV2DM114●● ⁽⁴⁾	0.596
4	4	5.5						
5.5	5.5	7.5	9...14	170	GV2ME16	LC1D12●●	GV2DM116●●	0.601
15	15	18.5	24...32	416	GV2ME32	LC1D32●●	GV2DM132●●	0.651

Add-on blocks

Description	Mounting of GV2	Sold in lots of	Unit reference
Combination block between circuit breaker and contactor	┌ rail	10	GV2AF3
	Mounting plate LAD 311	10	GV2AF4

⁽¹⁾ The breaking performance of circuit breakers GV2ME can be increased by adding a current limiter GV1L3, see page B6/21.

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

Volts	24	220	230
~ 50/60 Hz	B7	M7	P7
--- ⁽⁵⁾	BD	–	–

⁽³⁾ Please check the availability of your variant in the index page A2/16. The SEARCH function of your viewer can be used.

⁽⁴⁾ Type 2 coordination also possible, see page A5/11.

⁽⁵⁾ Only available for GV2DM. Coil with integral suppression device as standard.

Note: The combinations are valid for IE2 motors and IE3 with maximum starting current = 7.5 x motor rating current (see pages A5/4 and A5/5).

Open motor starters

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GV2DM102●●

0.06 to 250 kW at 400/415 V: type 1 coordination											
Standard power ratings of 3-phase motors 50/60 Hz in category AC-3									Circuit breaker		Contactor
400/415 V			440 V			500 V			Reference	Setting range	Reference ⁽²⁾
P	I _e	I _q ⁽¹⁾	P	I _e	I _q ⁽¹⁾	P	I _e	I _q ⁽¹⁾	References in italics are available in CEE zone only	of thermal trips	
kW	A	kA	kW	A	kA	kW	A	kA		A	
0.06	0.2	50	0.06	0.19	50	–	–	–	GV2ME02 GV2ME02AP	0.16...0.25	LC1K06 or LC1D09
0.09	0.3	50	0.09 0.12	0.28 0.37	50	–	–	–	GV2ME03 GV2ME03AP	0.25...0.40	LC1K06 or LC1D09
0.12 0.18	0.44 0.6	50	–	–	–	–	–	–	GV2ME04 GV2ME04AP	0.40...0.63	LC1K06 or LC1D09
0.25 0.37	0.85 1.1	50	0.25 0.37	0.76 0.99	50	–	–	–	GV2ME05 GV2ME05AP	0.63...1	LC1K06 or LC1D09
–	–	–	–	–	–	0.37	0.88	50	GV2ME06	1...1.6	LC1K06 or LC1D09
0.55	1.5	50	0.55	1.36	50	0.55	1.2	50	GV2ME06AP	1...1.6	LC1K06 or LC1D09
–	–	–	–	–	–	0.75	1.5	50	GV2ME06 GV2ME06AP	1...1.6	LC1K06 or LC1D09
0.75	1.9	50	0.75	1.68	50	–	–	–	GV2ME07	1.6...2.5	LC1K06 or LC1D09
–	–	–	1.1	2.37	50	1.1	2.2	50	GV2ME07AP	1.6...2.5	LC1K06 or LC1D09
1.1 1.5	2.7 3.6	50	–	–	–	1.5	2.9	50	GV2ME08	2.5...4	LC1K06 or LC1D09
–	–	–	1.5	3.06	50	2.2	3.9	50	GV2ME08AP	2.5...4	LC1K06 or LC1D09
2.2	4.9	50	2.2	4.42	50	–	–	–	GV2ME10	4...6.3	LC1K06 or LC1D09
–	–	–	3	5.77	50	3	5.2	50	GV2ME10AP	4...6.3	LC1K06 or LC1D09
3	6.5	50	–	–	–	4	6.8	10	GV2ME14	6...10	LC1K09 or LC1D09
4	8.5	50	4	7.9	15	5.5	9.2	10	GV2ME14AP	6...10	LC1K09 or LC1D09
5.5	11.5	15	5.5	10.4	8	7.5	12.4	6	GV2ME16	9...14	LC1K12 or LC1D12
–	–	–	–	–	–	–	–	–	GV2ME16AP	9...14	LC1K12 or LC1D12
7.5	15.5	15	7.5	13.7	8	9	13.9	6	GV2ME20	13...18	LC1D18
–	–	–	9	16.9	8	–	–	–	GV2ME20AP	13...18	LC1D18
9	18.1	15	11	20.1	6	11	17.6	4	GV2ME21	17...23	LC1D25
–	–	–	–	–	–	–	–	–	GV2ME21AP	17...23	LC1D25
11	22	15	–	–	–	15	23	4	GV2ME22	20...25	LC1D25
–	–	–	–	–	–	–	–	–	GV2ME22AP	20...25	LC1D25
15	29	10	15	26.5	6	18.5	28	4	GV2ME32	24...32	LC1D32
–	–	–	–	–	–	–	–	–	GV2ME32AP	24...32	LC1D32
18.5	35	50	18.5	32.8	50	22	33	10	GV3P40	30...40	LC1D40A
22	41	50	22	39	50	30	44	10	GV3P50	37...50	LC1D50A
30	55	50	30	51.5	50	37	53	10	GV3P65	48...65	LC1D65A
37	66	50	–	–	–	–	–	–	GV3P73	62...73	LC1D80A
–	–	–	37	64	70	45	64	30	GV4P80	40...80	LC1D65A
37	66	100	45	76	70	55	78	30	GV4P80	40...80	LC1D80
45	80	100	–	–	–	–	–	–	GV4P115	65...115	LC1D95
55	97	100	55	90	70	75	106	30	GV4P115	65...115	LC1D115
75	132	36	75	125	35	90	128	30	GV5P150F	70...150	LC1D150
–	–	–	90	146	35	–	–	–	⁽³⁾	–	⁽³⁾
90	160	36	–	–	–	110	156	30	⁽³⁾	–	⁽³⁾
110	195	36	–	–	–	–	–	–	⁽³⁾	–	⁽³⁾
160	280	36	318	280	35	–	–	–	⁽³⁾	–	⁽³⁾
–	–	–	–	–	–	220	308	30	⁽³⁾	–	⁽³⁾
200	350	36	220	318	35	–	–	–	⁽³⁾	–	⁽³⁾
250	430	36	250	401	35	335	460	30	⁽³⁾	–	⁽³⁾

⁽¹⁾ The breaking performance of circuit breakers GV2ME can be increased by adding a current limiter GV1L3.

⁽²⁾ For reversing operation, replace the prefix LC1 with LC2.

⁽³⁾ Please consult your regional sales office.

0.06 to 250 kW at 400/415 V: type 2 coordination

Standard power ratings of 3-phase motors 50/60 Hz in categ or y AC-3									Circuit breaker	Setting range of thermal trips	Contactor Reference ⁽²⁾
400/415 V			440 V			500 V			Reference <i>References in italics are available in CEE zone only</i>	A	
P kW	I _e A	I _q ⁽¹⁾ kA	P kW	I _e A	I _q ⁽¹⁾ kA	P kW	I _e A	I _q ⁽¹⁾ kA			
0.06	0.2	130	0.06	0.19	130	–	–	–	GV2P02 or GV2ME02 or GV2ME02AP	0.16...0.25	LC1D09
–	–	–	0.09	0.28	130	–	–	–	GV2P03 or GV2ME03 or GV2ME03AP	0.25...0.4	LC1D09
0.09	0.3	130	0.12	0.37	130	–	–	–	GV2P04 or GV2ME04 or GV2ME04AP	0.4...0.63	LC1D09
0.12	0.44	130	–	–	–	–	–	–	GV2P05 or GV2ME05 or GV2ME05AP	0.63...1	LC1D09
0.18	0.6	130	0.18	0.55	130	–	–	–	GV2P06 or GV2ME06 or GV2ME06AP	1...1.6	LC1D09
0.25	0.85	130	0.25	0.76	130	–	–	–	GV2P06 or GV2ME06 or GV2ME06AP	1...1.6	LC1D09
0.37	1.1	130	0.37	0.99	130	–	–	–	GV2P07 or GV2ME07 or GV2ME07AP	1.6...2.5	LC1D09
–	–	–	–	–	–	0.37	0.88	130	GV2P08 or GV2ME08 or GV2ME08P	2.5...4	LC1D09
0.55	1.5	130	0.55	1.36	130	0.55	1.2	130	GV2P10 or GV2ME10 or GV2ME10AP	4...6.3	LC1D09
–	–	–	–	–	–	0.75	1.5	130	GV2ME10 or GV2ME10AP	4...6.3	LC1D09
0.75	1.9	130	0.75	1.68	130	–	–	–	GV2P10	4...6.3	LC1D09
–	–	–	1.1	2.37	130	1.1	2.2	130	GV2P14 or GV2ME14 or GV2ME14AP	6...10	LC1D09
1.1	2.7	130	–	–	–	1.5	2.9	130	GV2ME14 or GV2ME14AP	6...10	LC1D09
1.5	3.6	130	1.5	3.06	130	2.2	3.9	130	GV2P14	6...10	LC1D12
–	–	–	–	–	–	–	–	–	GV2P16 or GV2ME16 or GV2ME16AP	9...14	LC1D25
2.2	4.9	130	–	–	–	–	–	–	GV2P20 or GV2ME20 or GV2ME20AP	13...18	LC1D25
–	–	–	2.2	4.42	50	–	–	–	GV2P21 or GV2ME21 or GV2ME21AP	17...23	LC1D25
–	–	–	3	5.77	50	3	5.2	50	GV2P22 or GV2ME22 or GV2ME22AP	20...25	LC1D25
–	–	–	2.2	4.42	130	–	–	–	GV2P22	20...25	LC1D32
–	–	–	3	5.77	130	3	5.2	130	GV2P32 or GV2ME32 or GV2ME32AP	24...32	LC1D32
3	6.5	130	–	–	–	–	–	–	GV3P40	30...40	LC1D50A
4	8.5	130	–	–	–	–	–	–	GV3P40	30...40	LC1D65A
–	–	–	4	7.9	15	4	6.8	10	GV3P50	37...50	LC1D50A
–	–	–	–	–	–	5.5	9.2	10	GV3P50	37...50	LC1D65A
–	–	–	–	–	–	4	7.9	130	GV3P65	48...65	LC1D65A
5.5	11.5	130	5.5	10.4	50 or 8	7.5	12.4	42 or 6	GV3P65	48...65	LC1D65A
–	–	–	7.5	13.7	50 or 8	9	13.9	42 or 6	GV3P73	62...73	LC1D80A
7.5	15.5	50 or 15	9	16.9	20 or 8	–	–	–	GV4P80	40...80	LC1D65A
9	18.1	50 or 15	11	20.1	20 or 8	11	17.6	10 or 6	GV4P80	40...80	LC1D80
11	22	50 or 15	–	–	–	–	–	–	GV4P115	65...115	LC1D115
–	–	–	–	–	–	15	23	10 or 6	GV5P150H	70...150	LC1D150
15	29	50 or 10	15	26.5	20 or 6	18.5	28	10 or 4	–	–	–
18.5	35	50	–	–	–	–	–	–	–	–	–
–	–	–	18.5	32.8	50	22	33	10	–	–	–
22	41	50	–	–	–	–	–	–	–	–	–
–	–	–	22	39	50	30	44	10	–	–	–
30	55	50	30	51.5	50	–	–	–	–	–	–
–	–	–	–	–	–	37	53	10	–	–	–
37	66	50	–	–	–	–	–	–	–	–	–
–	–	–	37	64	70	–	–	–	–	–	–
37	66	100	45	76	70	⁽³⁾	⁽³⁾	⁽³⁾	–	–	–
45	80	100	55	90	70	⁽³⁾	⁽³⁾	⁽³⁾	–	–	–
55	97	100	–	–	–	⁽³⁾	⁽³⁾	⁽³⁾	–	–	–
75	132	70	75	125	65	–	–	–	–	–	–
–	–	–	90	146	65	–	–	–	–	–	–

(1) The breaking performance of circuit breakers GV2P can be increased by adding a current limiter GV1L3.

(2) Combinations with circuit breaker GV2ME are type 2 coordinated only at 400/415 V and 440 V.

(3) Please consult your regional sales office.



GV2ME

Motor circuit breakers from 0.06 to 15 kW / 400 V, with screw clamp terminals

Deca - Frame 2 (ref. GV2ME) with pushbutton control

Standard power ratings of 3-phase motors 50/60 Hz in category AC-3									Setting range of thermal trips (2)	Magnetic tripping current I _d ± 20 %	Reference
400/415 V			500 V			690 V					
P	I _{cu}	I _{cs} (1)	P	I _{cu}	I _{cs} (1)	P	I _{cu}	I _{cs} (1)			
kW	kA	%	kW	kA	%	kW	kA	%	A	A	
-	-	-	-	-	-	-	-	-	0.1...0.16	1.5	GV2ME01
0.06	*	*	-	-	-	-	-	-	0.16...0.25	2.4	GV2ME02
0.09	*	*	-	-	-	-	-	-	0.25...0.40	5	GV2ME03
0.12	*	*	-	-	-	0.37	*	*	0.40...0.63	8	GV2ME04
0.18	*	*	-	-	-	-	-	-			
0.25	*	*	-	-	-	0.55	*	*	0.63...1	13	GV2ME05
0.37	*	*	0.37	*	*	-	-	-	1...1.6	22.5	GV2ME06
0.55	*	*	0.55	*	*	0.75	*	*			
-	-	-	0.75	*	*	1.1	*	*			
0.75	*	*	1.1	*	*	1.5	3	75	1.6...2.5	33.5	GV2ME07
1.1	*	*	1.5	*	*	2.2	3	75	2.5...4	51	GV2ME08
1.5	*	*	2.2	*	*	3	3	75			
2.2	*	*	3	50	100	4	3	75	4...6.3	78	GV2ME10
3	*	*	4	10	100	5.5	3	75	6...10	138	GV2ME14
4	*	*	5.5	10	100	7.5	3	75			
5.5	15	50	7.5	6	75	9	3	75	9...14	170	GV2ME16
-	-	-	-	-	-	11	3	75			
7.5	15	50	9	6	75	15	3	75	13...18	223	GV2ME20
9	15	40	11	4	75	18.5	3	75	17...23	327	GV2ME21
11	15	40	15	4	75	-	-	-	20...25	327	GV2ME22 (3)
15	10	50	18.5	4	75	22	3	75	24...32	416	GV2ME32

Motor circuit breakers from 0.06 to 15 kW / 400 V, with lugs

To order thermal magnetic circuit breakers with connection by lugs, add the digit **6** to the end of reference selected above.

Example: ref. **GV2ME08** becomes **GV2ME086**.

Thermal magnetic circuit breakers GV2ME with built-in auxiliary contact block

With instantaneous auxiliary contact block (composition, see page B6/21):

- GVAE1, add suffix **AE1TQ** to the motor circuit breaker reference selected above.
Example: **GV2ME01AE1TQ**.
- GVAE11, add suffix **AE11TQ** to the motor circuit breaker reference selected above.
Example: **GV2ME01AE11TQ**.
- GVAN11, add suffix **AN11TQ** to the motor circuit breaker reference selected above.
Example: **GV2ME01AN11TQ**.

These circuit breakers with built-in contact block are sold in lots of 20 units in a single pack.

(1) As % of I_{cu}.

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

(3) Maximum rating which can be mounted in enclosures **GV2MC** or **MP**, please consult your Regional Sales Office.

* > 100 kA.



Motor
circuit
breakers

TeSys Power

Deca - Frame 2 Motor circuit breakers - Thermal-magnetic

Product references - UL applications

PB1216731R



GV2ME

Motor circuit breakers from 3/4 to 20 HP / 460 V, with screw clamp terminals										
Deca - Frame 2 (ref. GV2ME) with pushbutton control										
Thermal setting (A)	Maximum Horsepower ratings								Group Motor applications Max. Fuse or Circuit breaker (A)	Reference
	Single-Phase			Three-Phase						
	115 V	200 V	230 V	115 V	200 V	230 V	460 V	575 V		
0.1...0.16	-	-	-	-	-	-	-	-	450	GV2ME01
0.16...0.25	-	-	-	-	-	-	-	-	450	GV2ME02
0.25...0.40	-	-	-	-	-	-	-	-	450	GV2ME03
0.40...0.63	-	-	-	-	-	-	-	-	450	GV2ME04
0.63...1	-	-	-	-	-	-	-	1/2	450	GV2ME05
1...1.6	-	-	1/10	-	-	-	3/4	3/4	450	GV2ME06
1.6...2.5	-	1/6	1/6	-	1/2	1/2	1	1.5	450	GV2ME07
2.5...4	1/8	1/4	1/3	-	3/4	3/4	2	3	450	GV2ME08
4...6.3	1/4	1/2	1/2	3/4	1	1.5	3	5	450	GV2ME10
6...10	1/2	1	1.5	1	2	3	5	7.5	450	GV2ME14
9...14	3/4	2	2	2	3	3	10	10	450	GV2ME16
13...18	1	2	3	2	5	5	10	15	450	GV2ME20
17...23	1.5	3	3	3	5	7.5	15	20	450	GV2ME21
20...25	2	-	-	-	7.5	7.5	15	20	450	GV2ME22
24...32	2	5	5	5	7.5	10	20	25	450	GV2ME32



Motor circuit breakers