

# TeSys Control

Deca circuit breakers ref. GV2ME, undervoltage trips

## Product references

Enclosed starters

PB121673.tif



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									Setting range of thermal trips (2)	Magnetic tripping current I <sub>d</sub> ± 20 %	Reference
400/415 V			500 V			690 V					
P	I <sub>cu</sub>	I <sub>cs</sub> (1)	P	I <sub>cu</sub>	I <sub>cs</sub> (1)	P	I <sub>cu</sub>	I <sub>cs</sub> (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)

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
		60 Hz	GVAX225
	220...240 V	50 Hz	GVAX225
		60 Hz	GVAX226
	380...400 V	50 Hz	GVAX385
		60 Hz	GVAX386
	415...440 V	50 Hz	GVAX415
		60 Hz	GVAX385

GVAX technical characteristics: see in chapter B6.

(1) As % of I<sub>cu</sub>.

(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.

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GVAX●●●

### D.O.L. starters, reversing, from 0.12 to 15 kW at 400/415 V, type 1 coordination

This pre-assembled combination comprises:

- 1 motor circuit breaker GV2 ME,
- 1 3-pole reversing contactor LC2 D,
- 1 combination block GV2AF3.

#### Characteristics

Starter type	GV2	DM202 to DM210	DM214	DM216	DM220	DM221	DM222	DM232	
Breaking capacity (I <sub>q</sub> ) <sup>(1)</sup>	Conforming to IEC 60947-4-1	400/415 V	kA	50	50	15	15	15	10
		440 V	kA	50	15	8	8	6	6
		500 V	kA	50	10	6	6	4	4

#### References

##### D.O.L. starters, reversing<sup>(2)</sup>

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
400/415V	440 V	500 V			Motor circuit-breaker Reference	Contactor Reference to be completed <sup>(3)</sup>		
kW	kW	kW	A	A				kg
0.12	–	–	0.40...0.63	8	GV2ME04	LC2D09●●	GV2DM204●●	0.963
0.18	0.18	–	–	–	–	–	–	–
0.25	0.25	–	0.63...1	13	GV2ME05	LC2D09●●	GV2DM205●●	0.963
0.37	0.37	–	–	–	–	–	–	–
–	–	0.37	1...1.6	22.5	GV2ME06	LC2D09●●	GV2DM206●●	0.963
0.55	0.55	0.55	–	–	–	–	–	–
–	–	0.75	–	–	–	–	–	–
1.1	–	1.5	2.5...4	51	GV2ME08	LC2D09●●	GV2DM208●●	0.963
1.5	1.5	2.2	–	–	–	–	–	–
9	11	11	17...23	327	GV2ME21	LC2D25●●	GV2DM221●●	1.063
15	15	18.5	24...32	416	GV2ME32	LC2D32●●	GV2DM232●●	1.073

##### 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

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

<sup>(2)</sup> Type 2 coordination also possible, see page B6/21.

<sup>(3)</sup> See page B8/22.

<sup>(4)</sup> Standard control circuit voltages (for other voltages, please consult your Regional Sales Office):

Volts	24	220	230
~ 50/60 Hz	B7	M7	P7
--- <sup>(6)</sup>	BD	–	–

<sup>(5)</sup> Please check the availability of your variant in the index page A2/16. The SEARCH function of your viewer can be used.

<sup>(6)</sup> 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).



GV2DM202●●

Open motor starters



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

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

<sup>(2)</sup> For reversing operation, replace the prefix **LC1** with **LC2**.

<sup>(3)</sup> Please consult your regional sales office.

0.06 to 250 kW at 400/415 V: type 2 coordination										Circuit breaker Reference <i>References in italics are available in CEE zone only</i>	Setting range of thermal trips A	Contactor Reference <sup>(2)</sup>
Standard power ratings of 3-phase motors 50/60 Hz in categ or y AC-3												
400/415 V			440 V			500 V						
P	I <sub>e</sub>	I <sub>q</sub> <sup>(1)</sup>	P	I <sub>e</sub>	I <sub>q</sub> <sup>(1)</sup>	P	I <sub>e</sub>	I <sub>q</sub> <sup>(1)</sup>				
kW	A	kA	kW	A	kA	kW	A	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	–	–	–	–	–	–	–
0.25	0.85	130	0.25	0.76	130	–	–	–	–	–	–	–
0.37	1.1	130	0.37	0.99	130	–	–	–	–	–	–	–
–	–	–	–	–	–	0.37	0.88	130	–	GV2P06 or GV2ME06 or GV2ME06AP	1...1.6	LC1D09
0.55	1.5	130	0.55	1.36	130	0.55	1.2	130	–	GV2P06 or GV2ME06 or GV2ME06AP	1...1.6	LC1D09
–	–	–	–	–	–	0.75	1.5	130	–	GV2P06 or GV2ME06 or GV2ME06AP	1...1.6	LC1D09
0.75	1.9	130	0.75	1.68	130	–	–	–	–	GV2P07 or GV2ME07 or GV2ME07AP	1.6...2.5	LC1D09
–	–	–	1.1	2.37	130	1.1	2.2	130	–	–	–	–
1.1	2.7	130	–	–	–	1.5	2.9	130	–	GV2P08 or GV2ME08 or GV2ME08P	2.5...4	LC1D09
1.5	3.6	130	1.5	3.06	130	2.2	3.9	130	–	–	–	–
–	–	–	–	–	–	–	–	–	–	GV2P10 or GV2ME10 or GV2ME10AP	4...6.3	LC1D09
2.2	4.9	130	–	–	–	–	–	–	–	–	–	–
–	–	–	2.2	4.42	50	–	–	–	–	GV2ME10 or GV2ME10AP	4...6.3	LC1D09
–	–	–	3	5.77	50	3	5.2	50	–	–	–	–
–	–	–	2.2	4.42	130	–	–	–	–	GV2P10	4...6.3	LC1D09
–	–	–	3	5.77	130	3	5.2	130	–	–	–	–
3	6.5	130	–	–	–	–	–	–	–	GV2P14 or GV2ME14 or GV2ME14AP	6...10	LC1D09
4	8.5	130	–	–	–	–	–	–	–	–	–	–
–	–	–	4	7.9	15	4	6.8	10	–	GV2ME14 or GV2ME14AP	6...10	LC1D09
–	–	–	–	–	–	5.5	9.2	10	–	–	–	–
–	–	–	–	–	–	4	6.8	50	–	GV2P14	6...10	LC1D12
–	–	–	4	7.9	130	5.5	9.2	50	–	–	–	–
5.5	11.5	130	5.5	10.4	50 or 8	7.5	12.4	42 or 6	–	GV2P16 or GV2ME16 or GV2ME16AP	9...14	LC1D25
–	–	–	7.5	13.7	50 or 8	9	13.9	42 or 6	–	–	–	–
7.5	15.5	50 or 15	9	16.9	20 or 8	–	–	–	–	GV2P20 or GV2ME20 or GV2ME20AP	13...18	LC1D25
9	18.1	50 or 15	11	20.1	20 or 8	11	17.6	10 or 6	–	GV2P21 or GV2ME21 or GV2ME21AP	17...23	LC1D25
11	22	50 or 15	–	–	–	–	–	–	–	GV2P22 or GV2ME22 or GV2ME22AP	20...25	LC1D25
–	–	–	–	–	–	15	23	10 or 6	–	GV2P22	20...25	LC1D32
15	29	50 or 10	15	26.5	20 or 6	18.5	28	10 or 4	–	GV2P32 or GV2ME32 or GV2ME32AP	24...32	LC1D32
18.5	35	50	–	–	–	–	–	–	–	GV3P40	30...40	LC1D50A
–	–	–	18.5	32.8	50	22	33	10	–	GV3P40	30...40	LC1D65A
22	41	50	–	–	–	–	–	–	–	GV3P50	37...50	LC1D50A
–	–	–	22	39	50	30	44	10	–	GV3P50	37...50	LC1D65A
30	55	50	30	51.5	50	–	–	–	–	GV3P65	48...65	LC1D65A
–	–	–	–	–	–	37	53	10	–	GV3P65	48...65	LC1D65A
37	66	50	–	–	–	–	–	–	–	GV3P73	62...73	LC1D80A
–	–	–	37	64	70	–	–	–	–	GV4P80	40...80	LC1D65A
37	66	100	45	76	70	<sup>(3)</sup>	<sup>(3)</sup>	<sup>(3)</sup>	–	GV4P80	40...80	LC1D80
45	80	100	55	90	70	<sup>(3)</sup>	<sup>(3)</sup>	<sup>(3)</sup>	–	GV4P115	65...115	LC1D115
55	97	100	–	–	–	<sup>(3)</sup>	<sup>(3)</sup>	<sup>(3)</sup>	–	–	–	–
75	132	70	75	125	65	–	–	–	–	GV5P150H	70...150	LC1D150
–	–	–	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 <sub>d</sub> ± 20 %	Reference
400/415 V			500 V			690 V					
P	I <sub>cu</sub>	I <sub>cs</sub> (1)	P	I <sub>cu</sub>	I <sub>cs</sub> (1)	P	I <sub>cu</sub>	I <sub>cs</sub> (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<sub>cu</sub>.

(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