

# TeSys™ GV2 and GV3

## Manual Starter and Protector



GV2M  
w/ D-Line contactor

The GV2 and GV3 devices are 3-pole, horsepower-rated manual starters. They include a manual disconnect, Class 10 ambient-compensated, bi-metallic thermal overload relay, and an instantaneous magnetic trip mechanism in one compact unit.

Either starter can be used alone for local, manual control of a single motor or can be wired in front of a contactor to provide a complete, remotely operated motor control circuit. The GV2 and GV3 are particularly effective when multiple motor circuits are to be housed in one panel.

The GV2 and GV3 devices are UL Listed for group installations for motors with individual full-load currents up to 63 A. If each motor in a grouping is controlled by a GV2 or GV3 device, only one branch circuit protective device (circuit breaker or fusing) is necessary for the entire group. The table below specifies the maximum allowable size of the branch protector for each manual starter, in accordance with National Electrical Code Article 430-53.

The GV2P is listed and approved for UL 508 Type E self-protected starter applications when used with incoming line insulator GV2GH7.

The interrupting rating for group installations is 10 kA at 480 V for the GV2M and 50 kA at 480 V for both the GV2P and GV3M devices. The instantaneous trip is set at 13 times the thermal trip setting and is not adjustable.

The GV2M and the GV3M manual starters feature pushbutton control to indicate the ON or OFF state of the device. The GV2P features a rotary handle which indicates the ON or OFF state and also whether the unit has been tripped by overload, short-circuit, undervoltage, or shunt trip. All devices are now available with spring terminal clamps. Add "3" to the end of the catalog number.

### How to Order

To order the basic motor starter, select the model number (GV2ME●●, GV2P●●, or GV3ME●●) with the appropriate thermal setting from the table below. The thermal trip range and setting should be determined from the motor nameplate full-load current.



GV2ME



GV2P21 with  
GV2GH7 installed

Thermal Setting (A)	Maximum Horsepower Ratings						Group Motor Applications	GV2/3M pushbutton		GV2P rotary handle		
	1Ø		3Ø					Max. Fuse or Circuit Breaker	Catalog Number	Price	Catalog Number	Price
	115 V hp	230 V hp	200 V hp	230 V hp	460 V hp	575 V hp						
0.11-0.16	...	...	...	...	...	...	1200 A	GV2ME01▲	\$106.00	GV2P01	\$141.00	
0.16-0.25	...	...	...	...	...	...	1200 A	GV2ME02▲	106.00	GV2P02	141.00	
0.25-0.40	...	...	...	...	...	...	1200 A	GV2ME03▲	106.00	GV2P03	141.00	
0.40-0.63	...	...	...	...	...	...	1200 A	GV2ME04▲	120.00	GV2P04	155.00	
0.63-1	...	...	...	...	1/2	1/2	1200 A	GV2ME05▲	120.00	GV2P05	155.00	
1-1.6	...	1/10	...	...	3/4	1	1200 A	GV2ME06▲	120.00	GV2P06	155.00	
1.6-2.5	...	1/6	1/2	1/2	1	1 1/2	1200 A	GV2ME07▲	120.00	GV2P07	155.00	
2.5-4	1/8	1/3	3/4	1	2	3	1200 A	GV2ME08▲	120.00	GV2P08	155.00	
4-6.3	1/4	1/2	1 1/2	1 1/2	3	5	1200 A	GV2ME10▲	120.00	GV2P10	155.00	
6-10	1/2	1 1/2	2	3	5	7 1/2	1200 A	GV2ME14▲	120.00	GV2P14	155.00	
9-14	3/4	2	3	3	10	10	1200 A	GV2ME16▲	149.00	GV2P16	185.00	
13-18	1	3	5	5	10	15	1200 A	GV2ME20▲	149.00	GV2P20	185.00	
17-23	1 1/2	3	5	7 1/2	15	20	1200 A	GV2ME21▲	149.00	GV2P21	185.00	
20-25	2	3	5	7 1/2	15	20	1200 A	GV2ME22▲	149.00	GV2P22	185.00	
24-32	2	5	10	10	20	30	1200 A	GV2ME32	149.00	GV2P32	185.00	
1-1.6	...	1/10	...	...	3/4	1	500 A	GV3ME06	269.00	...	...	
1.6-2.5	...	1/6	1/2	1/2	1	1 1/2	500 A	GV3ME07	269.00	...	...	
2.5-4	1/8	1/3	3/4	1	2	3	500 A	GV3ME08	269.00	...	...	
4-6	1/4	1/2	1 1/2	1 1/2	3	...	500 A	GV3ME10	269.00	...	...	
6-10	1/2	1 1/2	2	3	5	7 1/2	500 A	GV3ME14	269.00	...	...	
10-16	1	2	3	5	10	10	500 A	GV3ME20	299.00	...	...	
16-25	2	3	5	7 1/2	15	20	500 A	GV3ME25	299.00	...	...	
25-40	3	7 1/2	10	10	25	30	500 A	GV3ME40	336.00	...	...	
40-63	5	10	20	20	40	60	500 A	GV3ME63	336.00	...	...	

▲ For spring terminals add 3 to the catalog number, for example, GV2ME013. GV2ME32 is not available with spring terminals.

### Specifications

Operating Positions:		File E164864 CNN NLRV File LR81630 Class 3211 05 
Rated voltage—600 V		Shock resistance—30 g (conforming to IEC 600 68-2-27)
Rated thermal current—25 A (GV2), 63 A (GV3)		Vibration resistance—5 g (5 to 150 Hz) (IEC 600 68-2-26)
Interrupting current at 480 V: 12 kA (GV2M), 50 kA (GV2P and GV3M)		Ambient temperature: -40 to 176°F (-40 to +80°C) for storage -4 to 140°F (-20 to +60°C) open operation -4 to 104°F (-20 to +40°C) enclosed operation
Mechanical life: GV2: GV3M06 to M25: GV3M40 to M63:	100,000 operations 100,000 operations 63,000 operations	Ambient temperature compensation: -4 to 140°F (-20 to +60°C) open operation -4 to 104°F (-20 to +40°C) enclosed operation
		Maximum operating life—25 operations per hour
		Operating current of magnetic trip is approximately 13 times maximum thermal trip (non-adjustable setting)

For additional information, reference Catalog #2520CT0001R9/02.



GV3M06