

GV2-M and K range with spring terminals

References

GV2-M motor circuit breakers					
References	Power (kW) 400/415V	Rating (A)	References	Power (kW) 400/415V	Rating (A)
GV2-M013	<0.06	0.1 - 0.16	GV2-M083	1.1	2.5-4
GV2-M023	0.06	0.16 - 0.25	GV2-M103	2.2	4-6.3
GV2-M033	0.09	0.25 - 0.40	GV2-M143	4	6-10
GV2-M043	0.12	0.40 - 0.63	GV2-M163	5.5	9-14
GV2-M053	0.25	0.63 - 1	GV2-M203	7.5	13-18
GV2-M063	0.37	1 - 1.6	GV2-M213	9	17-23
GV2-M073	0.75	1.16 - 2.5	GV2-M223	11	20-25

GV2-M contact blocks			
Instantaneous auxiliary contact			
Mounting	■ Front	NO+NC	GV2-AE113
		NO+NO	GV2-AE203
■ Side	NO+NC	GV2-AN113	
	NO+NO	GV2-AN203	

K contactors				
Control	■ AC	Reference (1)	Reference (1)	Reference (1)
	■ DC	LC1-K06**3●●	LC1-K09**3●●	LC1-K12**3●●
	■ Low consumption DC	LP1-K06**3●●	LP1-K09**3●●	LP1-K12**3●●
Power Rating	AC3, 3-phase 400/415 V	2.2	4	5.5
	AC3 max Ie (Ue <440 V)	6	9	12

Reversing contactors				
Control	■ AC	Reference (1)	Reference (1)	Reference (1)
	■ DC	LC2-K06**3●●	LC2-K09**3●●	LC2-K12**3●●
	■ Low consumption DC	LP1-K06**3●●	LP1-K09**3●●	LP3-K12**3●●
Power Rating	AC3, 3-phase 400/415 V	2.2	4	5.5
	AC3 max Ie (Ue <440 V)	6	9	12

Control relays			
Control	■ AC	CA2-KN 3	Consumption 4.5 VA
	■ DC	CA3-KN 3	3 W
	■ Low consumption DC	CA4-KN 3	1.8 W

(1)Reference should be completed as follows; Replace ** with auxiliary contact reference from table below and ●● with coil voltage reference from table below.

Auxiliary contact composition (contactors) **
 10 = 1NO contact 01 = 1NC contact

Contact composition (control relays only) **
 40 = 4 NO 22 = 2 NC + 2 NC 13 = 1 NO + 3 NC
 04 = 4 NC 31 = 3 NO + 1 NC

Coil voltage ●●							
Normal voltage	24 V	48 V	110 V	115 V	220 V	230 V	240 V
AC control	B7	E7	F7	FE7	M7	P7	U7
DC control	BD	ED					
Low voltage control	BW3	EW3					

Instantaneous auxiliary contact attachments			
Composition	NO	NC	Reference
	2	-	LA1-KN203
	-	2	LA1-KN023
	1	1	LA1-KN113
	4	-	LA1-KN403
	3	1	LA1-KN313
	2	2	LA1-KN223
	1	3	LA1-KN133
	-	4	LA1-KN043

Reducing cable ends		
For 1 and 1.5mm ²	Packs of 20 strips of 6	LA9-D99

K range contactors and relays

GV2-M motor circuit breakers

PCB mounting and screw connection accessories

References

Pin mounting GV2-M and K range for printed circuit mounting

GV2-M motor circuit breakers	Reference
Printed circuit add-on block, lots of 10 (links to GV2 enabling direct connection to PCB)	GV2-GA01

Pin mounting K range contactor for printed circuits
References: see spring terminals, substitute suffix 3 with suffix 5. Example LP4-K06103BW3 becomes LP4-K06105BW5

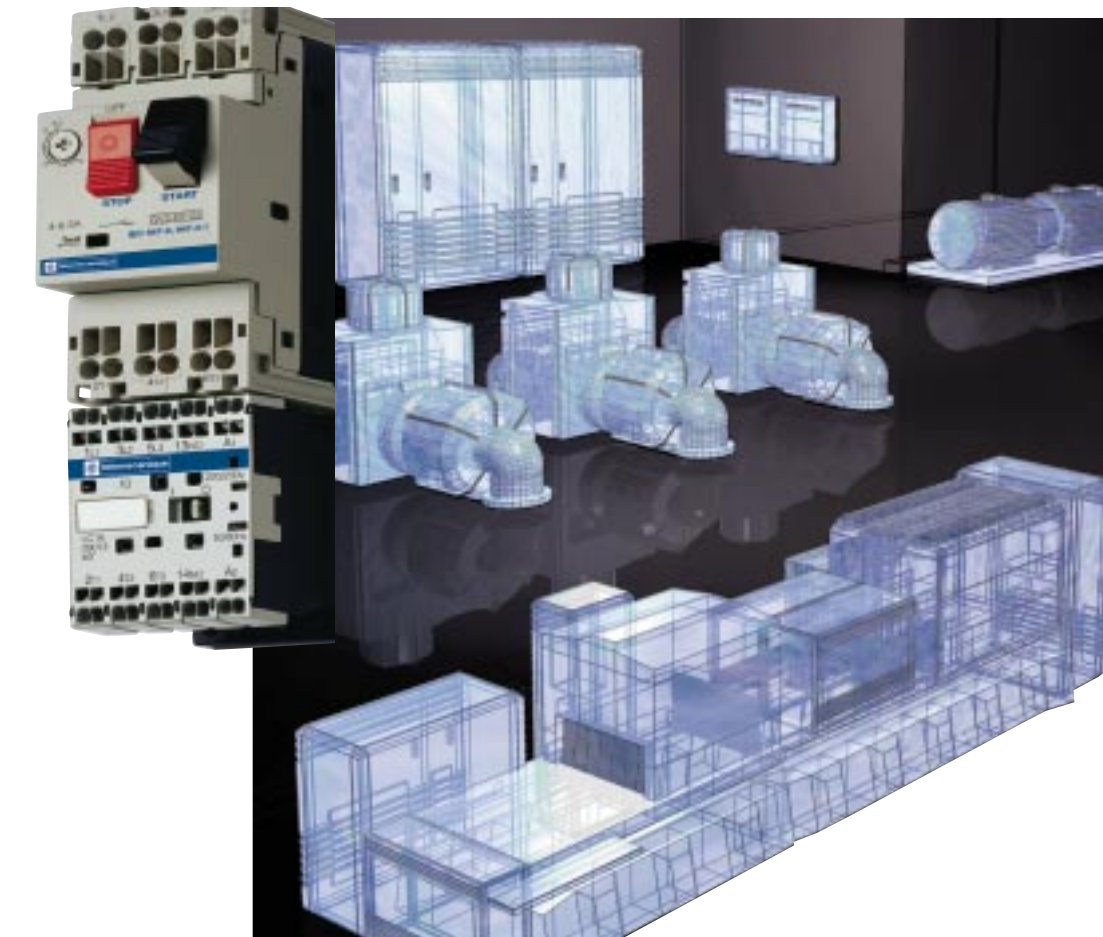
GV2-M and K range connection accessories with conventional screw terminals

Sets of busbars	Reference	
Number of branch circuits	Pitch in mm	
2	45	GV2-G245
	54	GV2-G254
	72	GV2-G272
3	54	GV2-G354
4	45	GV2-G445
	54	GV2-G454
	72	GV2-G472
5	54	GV2-G554

GV2-M and K range combination blocks	Reference
Enables direct close connection between GV2-M and K contactor with conventional screw terminals	GV2-AF01
Power supply terminal block	GV1-G09

Telemecanique

New spring terminal K range contactors and GV2-M motor circuit breakers selection guide



Merlin Gerin
 Modicon
 Square D
 Telemecanique



Schneider Electric Limited University of Warwick Science Park, Sir William Lyons Road, Coventry, CV4 7EZ
 Tel: 024 7641 6255 Fax: 024 7641 7517 Internet address: <http://www.schneider.co.uk>



Telemecanique GV2-M and K range with spring terminals



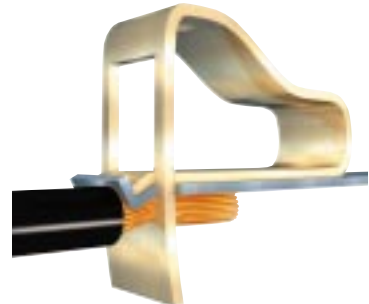
Telemecanique's K range of mini-contactors and relays is renowned for its wide choice of connection options. Versions with push-on tabs (both 6.3mm and 2.8mm) and for direct PCB mounting have long been available, as well as the conventional screw terminal type.

Now K range is available with spring terminals. Complete motor starters using spring terminal technology can be assembled, as Telemecanique also offers this option on GV2-M motor circuit breakers.

Spring terminal technology offers proven benefits:

- A more consistent connection than manual tightening of conventional screw terminals

- Integrity of the connection over time, even under extreme conditions of temperature and vibration. The need for maintenance tightening is eliminated



Unlike other spring terminal equipped products, Telemecanique K range contactors, relays and GV2-M range motor circuit breakers have a built-in 'spring stop', which prevents the installer from exceeding the elasticity limits of the spring when manipulating with a screwdriver. This guarantees the integrity of the connection.

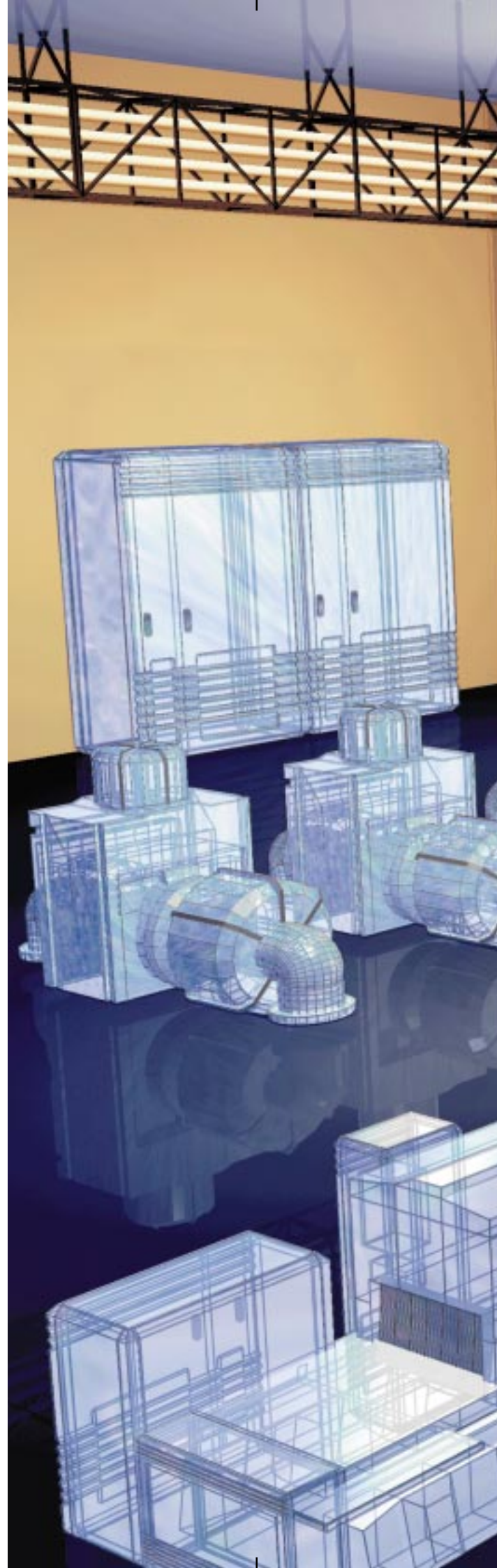
- Cable creep, and the effects of temperature cycling are automatically compensated

- Installation and wiring time is much reduced due to elimination of the need for cable ends

- Direct contact between spring and terminal guarantees consistent performance of the connection.

Wiring is fast and simple:

It is only necessary to strip the insulation, exposing the required length of conductor. The wireman then inserts a standard 3mm flat bladed screwdriver into the square slot adjacent to the terminal, pushes the bared wire into the oval hole and releases the screwdriver. The spring terminal clamps the cable efficiently and effectively. Two spring connections per contact are provided to enable looping of control wiring or connection of power wiring for reversing starters.



Telemecanique GV2-M and K range with conventional screw terminals



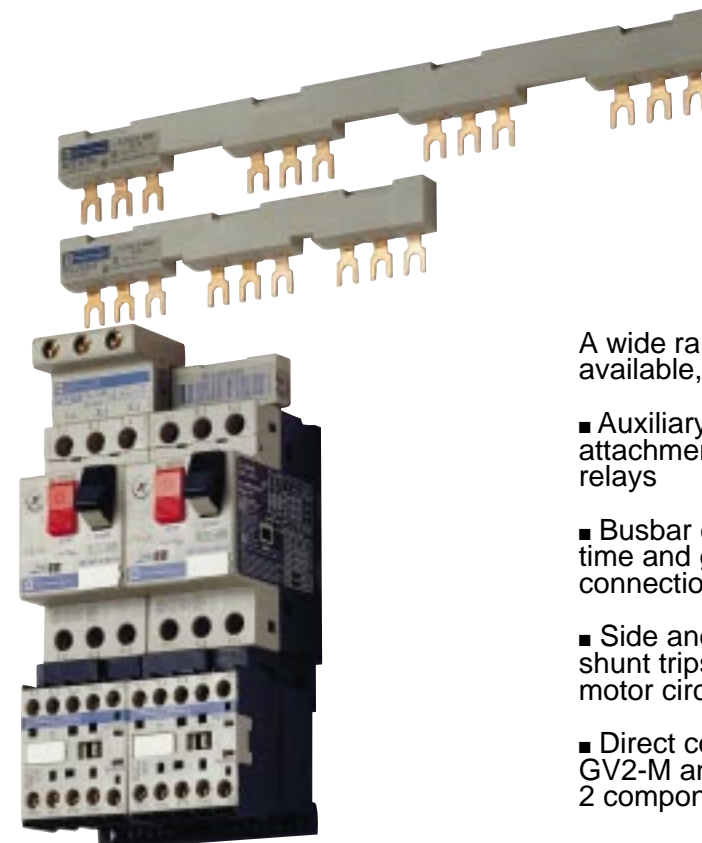
Conventional screw terminals are still first choice for the majority of users.

Screw terminal versions of K and GV2-M offer supreme simplicity and reliability:

- Plus / minus screw terminals - ideal for wiring using power screwdrivers

- Maximum mounting flexibility - clip direct to DIN rail or screw fix

- Direct mounting of K overload relay with integrated contactor coil and auxiliary contact connection



A wide range of accessories is available, including:

- Auxiliary contact and timing attachments for K range contactors and relays

- Busbar connection kits - reduce wiring time and guarantee correct power connections

- Side and front mounted auxiliaries, shunt trips and no volt trips for GV2-M motor circuit breakers

- Direct connection block between GV2-M and K enabling fast assembly of 2 component motor starters

Telemecanique K range for printed circuit board mounting

The most cost-effective solution for high volume mass production

- Saves space and fitting time due to direct mounting onto PCBs

- Elimination of wiring - connection pins soldered directly onto PCBs

- Integration of the motor starter into the machine electronics



K range integrated with Tego Power

A flexible innovative solution for assembly of motor starters

- The starter is 'connected' rather than 'wired'

- Risk of wiring errors eliminated

- Cable marking and circuit testing no longer required

- Modular system allows fast adaptation or component changes

