PROTECTIVE RELAYS from SELCO USA, INC.

Current Relay **Power Relay**

Frequency Relay **Voltage Relay**

FUNCTIONS

The G-Line relays provides an efficient solution for applications where flexibility and cost of purchase are the main issues. Despite a low purchase price, SELCO G-Line relays provide high quality, proper measuring techniques and a vast number of programmable options.

Safety, accuracy and repeatability are important features in any protection system. G-Line relays all have built-in measuring transformers, one for phase measurement. Transformers provide the best possible isolation with near perfect linearity and thereby no loss of accuracy. Voltages and currents can be measured through resistors or optical couplers, which provide a much cheaper design. Such schemes however, compromise safety as well as accuracy.

A revolutionary measuring scheme enables the G-Line relays to operate at any voltage in the range 63 to 690 VAC, thus one relay covers any medium voltage application. Current measurements are done trough external 5A or 1A current transformers (CTs). The G-Line relays work with Line-Line as well as Line-Neutral systems.

The reference for the trip level is easily set by briefly pushing a PRESET button. Configuration and setup is extremely simple. Trip levels, hysteresis and delay are easily set by turning the dials located at the front plate.

The microprocessor based design provides superb flexibility. An optional programming kit connects the G-Line relays to the RS232-port of a standard PC, thus enabling the user to reprogram reaction parameter, scales, relay behavior, reset function etc. The programming kit allows the user to completely customize the function of the relay.

SELCO USA, INC.

G2000 Power Relay

G2200 Current Realy

Accessories: G0100 Programming Cable

Specifications in parentheses require setup by serial link
Specifications are subject to change without notice

	G2000 Power Relay	G2200 Current Relay
Function	Reverse Power Relay (Forward Power)	Over current (Under current)
Supply	24VDC ±20% / 0.75W	24VDC ±20% / 0.75W
Input Voltage	63 to 690VAC ±30%	
Input Current	G2000-00 5A, max 10A G2000-01 1A, max 2A	1 or 5A CT, max 10A
Frequency	35 to 75Hz	
Trip Level	2 to 20% (max 2 to 150%)	50 to 140% (max 10 to 150%)
Hysteresis	1 to 10% (max 1 to 50%)	1 to 10% (max 1 to 50%)
Delay	2 to 20sec. (max 1 to 360sec.)	3 to 30sec. (max 1 to 360sec.)
Operating Temp.	0º to 70ºC 32º to 158ºF	0º to 70ºC 32º to 158ºF
Relay Rating	380VAC, 5A, 1250VA 150VDC, 5A, 120W	380VAC, 5A, 1250VA 150VDC, 5A, 120W
Pick-up Relay - Normal State - Latching	 ND (NE) Non-Latching	 ND (NE) Non-Latching
Trip Relay - Normal State - Latching	 ND (NE) Non-Latching	 ND (NE) Non-Latching
Reset	Automatic (Manual by terminal 11)	Automatic (Manual by terminal 11)
Serial Link	RJ11-Modular (Custom Interface)	RJ11-Modular (Custom Interface)
Accuracy	±5%	±5%
Repeatability	±1%	±1%
EMC	EN50263	EN50263
Dimensions H x W x D	73 x 75 x 114mm 2.87 x 2.95 x 4.49 Inch	73 x 75 x 114mm 2.87 x 2.95 x 4.49 Inch
Weight	0,34Kg 0.75Lb	0,32Kg 0.71Lb
Burn-In	50 hours before final test	50 hours before final test
Installation	35 DIN rail or two 4mm or 3/16” screws	35 DIN rail or two 4mm or 3/16” screws
Enclosure Material	Polycarbonate Flame Retardant	Polycarbonate Flame Retardant

SELCO USA, INC.

G3000 Frequency Realy

G3100 Voltage Relay
G3600 O/U Voltage Relay

	G3000 Frequency Relay	G3100 Voltage Relay	G3600 Over & Under Voltage Relay
Function	Over- & Under Frequency	Over voltage (Under voltage)	Over- & Under voltage
Supply	24VDC ±20% / 0.75W	24VDC ±20% / 0.75W	24VDC ±20% / 0.75W
Input Voltage	63 to 690VAC ±30%	63 to 690VAC ±30%	63 to 690VAC ±30%
Input Current			
Frequency	35 to 75Hz	35 to 75Hz	35 to 75Hz
Trip Level	OF: 85 to 115% (max 75 to 125%) UF: 85 to 115% (max 75 to 125%)	100 to 120% (max 70 to 130%)	OV: 80 to 120% (max 70 to 130%) UV: 80 to 120% (max 70 to 130%)
Hysteresis		1 to 10% (max 1 to 50%)	
Delay	1 to 10sec. (max 1 to 360sec.)	1 to 10sec. (max 1 to 360sec.)	1 to 10sec. (max 1 to 360sec.)
Operating Temp.	0º to 70ºC 32º to 158ºF	0º to 70ºC 32º to 158ºF	0º to 70ºC 32º to 158ºF
Relay Rating	380VAC, 5A, 1250VA 150VDC, 5A, 120W	380VAC, 5A, 1250VA 150VDC, 5A, 120W	380VAC, 5A, 1250VA 150VDC, 5A, 120W
Pick-up Relay - Normal State - Latching	Under frequency ND (NE) Non-Latching	ND (NE) Non-Latching	Under voltage ND (NE) Non-Latching
Trip Relay - Normal State - Latching	Over frequency NE (ND) Non-Latching	ND (NE) Non-Latching	Over voltage NE (ND) Non-Latching
Reset	Automatic (Manual by terminal 11)	Automatic (Manual by terminal 11)	Automatic (Manual by terminal 11)
Serial Link	RJ11-Modular (Custom Interface)	RJ11-Modular (Custom Interface)	RJ11-Modular (Custom Interface)
Accuracy	±5%	±5%	±5%
Repeatability	±1%	±1%	±1%
EMC	EN50263	EN50263	EN50263
Dimensions H x W x D	73 x 75 x 114mm 2.87 x 2.95 x 4.49 Inch	73 x 75 x 114mm 2.87 x 2.95 x 4.49 Inch	73 x 75 x 114mm 2.87 x 2.95 x 4.49 Inch
Weight	0,31Kg 0.68Lb	0,31Kg 0.68Lb	0,31Kg 0.68Lb
Burn-In	50 hours before final test	50 hours before final test	50 hours before final test
Installation	35 DIN rail or two 4mm or 3/16” screws	35 DIN rail or two 4mm or 3/16” screws	35 DIN rail or two 4mm or 3/16” screws
Enclosure Material	Polycarbonate Flame Retardant	Polycarbonate Flame Retardant	Polycarbonate Flame Retardant

Accessories: G0100 Programming Cable

Specifications in parentheses require setup by serial link
Specifications are subject to change without notice

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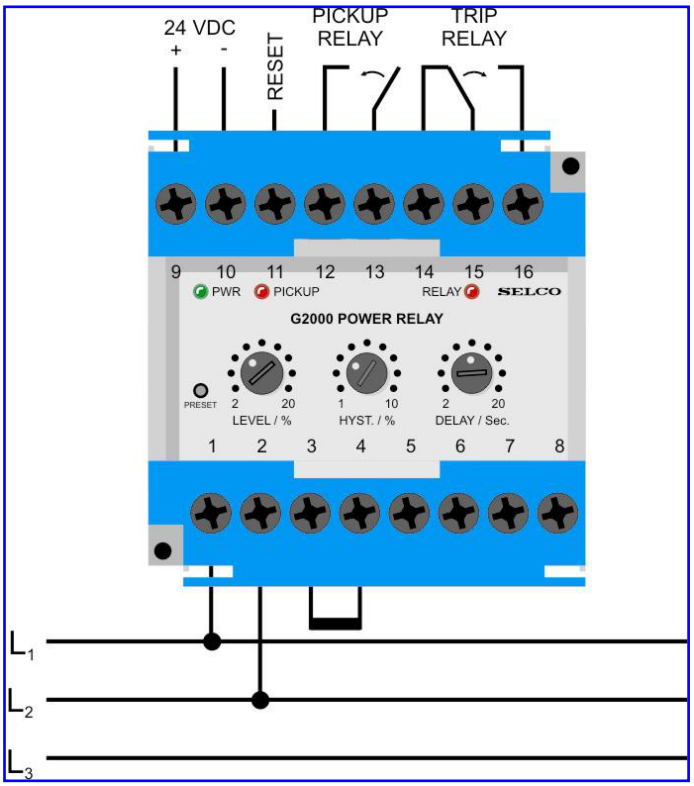
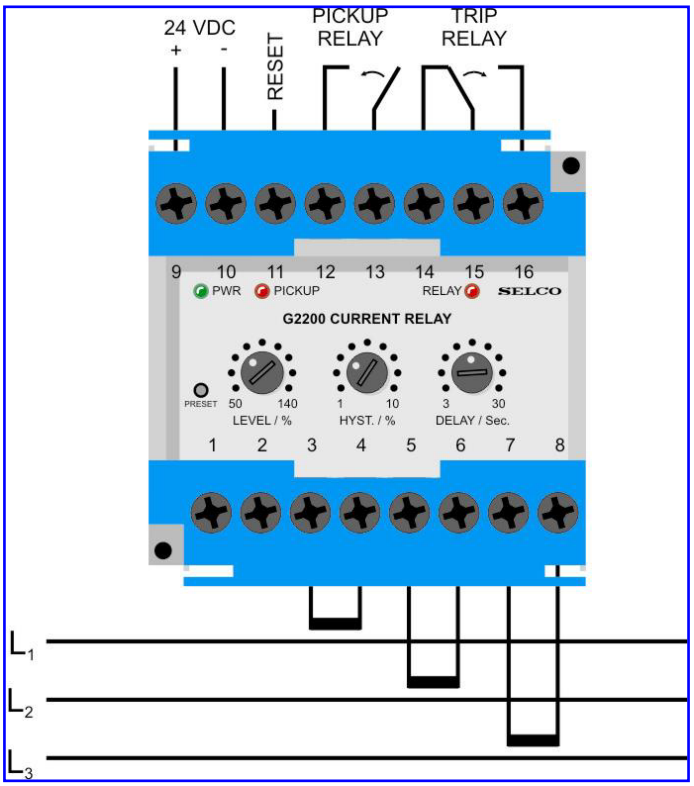
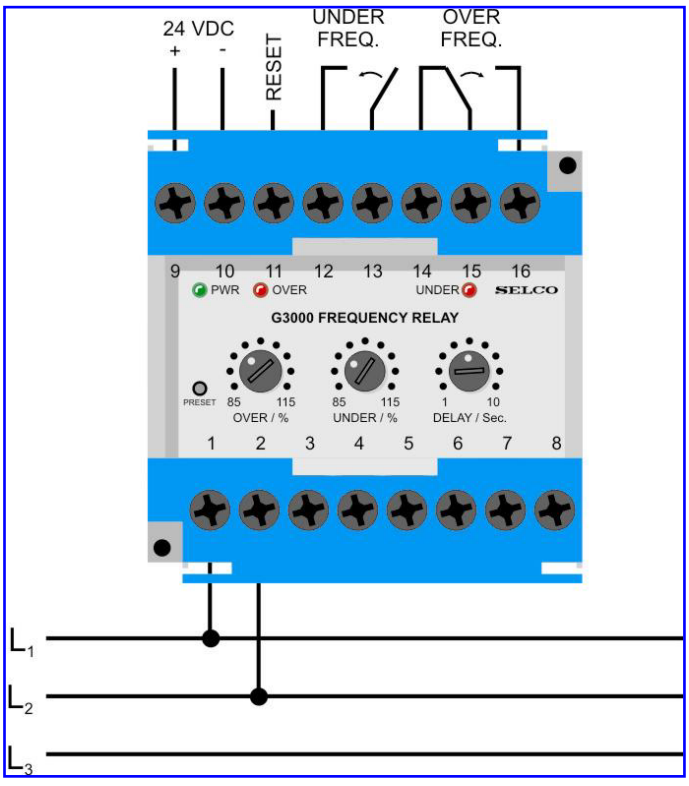
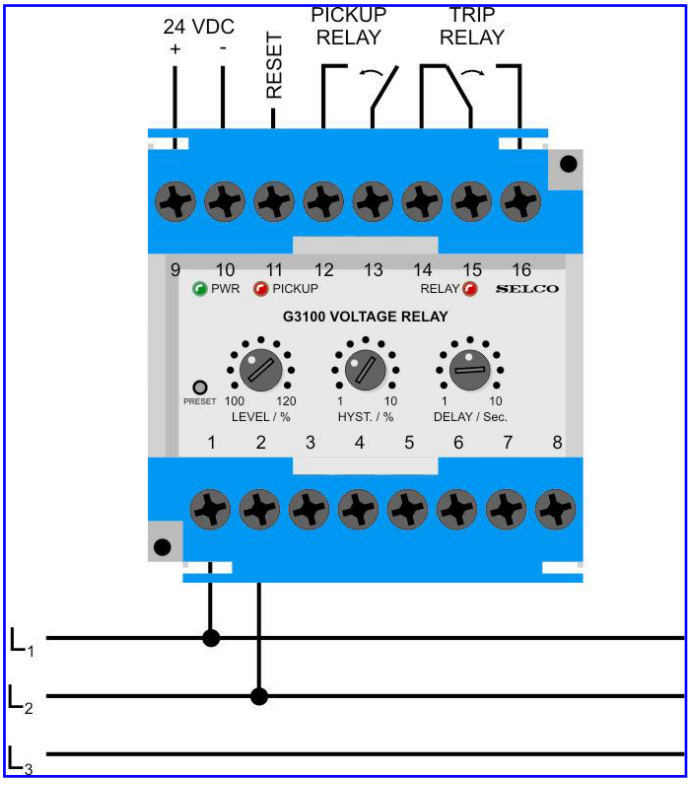
Wiring Diagram









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