

PROTECTION

NOTE: MIV1000 units include only the described voltage functions, MIV2000 include only frequency functions (4 units), and MIV3000 include both voltage and frequency (2) units.

Phase Overvoltage (59)

The MIV includes two separately adjustable phase overvoltage units. Each one can be independently enabled. Settings allow the pickup setpoint to be set from 2 to 60 V or 10 to 250 V depending on model and a time delay from 0 to 600 seconds to be set. The protection units can operate either on phase to phase or phase to ground voltage magnitudes depending on voltage magnitudes applied to MIV VTs.

Phase Undervoltage (27)

The phase undervoltage protection has the same settings and features as the phase overvoltage protection. In order to avoid permanent undervoltage tripping whenever a breaker is open and the VTs are located on the line side, a separate setting is provided to enable/disable undervoltage protection units when a breaker is open.

Ground Overvoltage (59N)

The MIV includes two separately adjustable ground overvoltage units. Each one can be independently enabled. Settings allow the pickup setpoint to be set from 2 to 60 V or 10 to 250 V depending on model and a time delay from 0 to 600 seconds to be set.

Voltage Unbalance (47)

A definite time voltage unbalance function operating on negative sequence voltage is included in the MIV 3000 relay. Pickup and time delay settings are the same as in the rest of voltage functions.

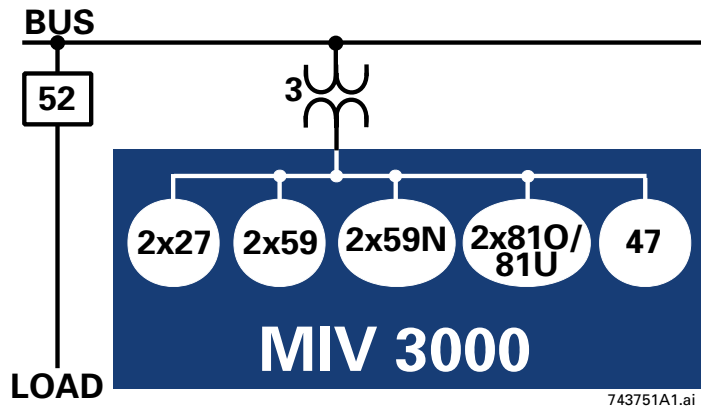
Frequency Functions (810/81U)

Two or four independent definite time frequency units are provided in the MIV (depending on model). Each unit can be independently set as underfrequency or overfrequency. Each frequency unit is supervised by an independently adjustable undervoltage element.

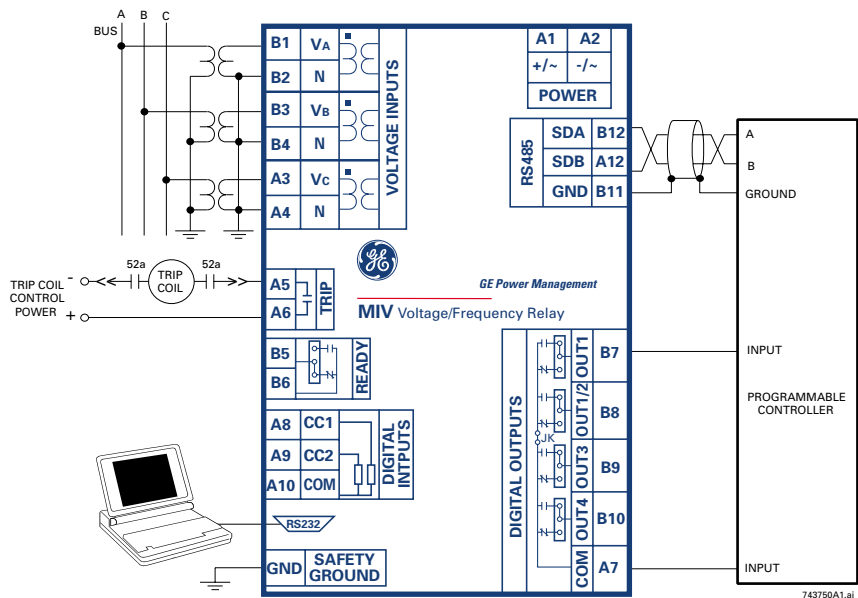
Configurable Logic

Up to a maximum of 4 configurable logic schemes can be implemented into the MIV by means of using a set of 4 pre-configured logic gates and timer cells. A graphical user interface is provided for configuration of MIV logic. The output of the MIV configurable logic can be used to configure digital outputs and LEDs.

FUNCTIONAL BLOCK DIAGRAM



WIRING



ORDERING

To order select the basic model and the desired features from the Selection Guide below.

MIV * 0 * 0 E 0 0 * 0 0 *

1		Voltage functions
2		Frequency functions
3		Voltage + frequency functions
0		10 - 250 V setting range
1		2 - 60 V setting range (only for MIV1000 models)
	F	24-48 VDC Power Supply
	H	110-250 VDC 110-220 VAC p.s.
	C	Individual relay
	S	Mounted in an M+ system†
	D	Depth reducing collar

† If relays are to be mounted in an M+ system either an M050 half 19" rack or M100 full 19" rack case must be ordered. The M050 and M100 racks are provided at no additional cost.



For more information on this product, please visit us on the web or on our product CD.