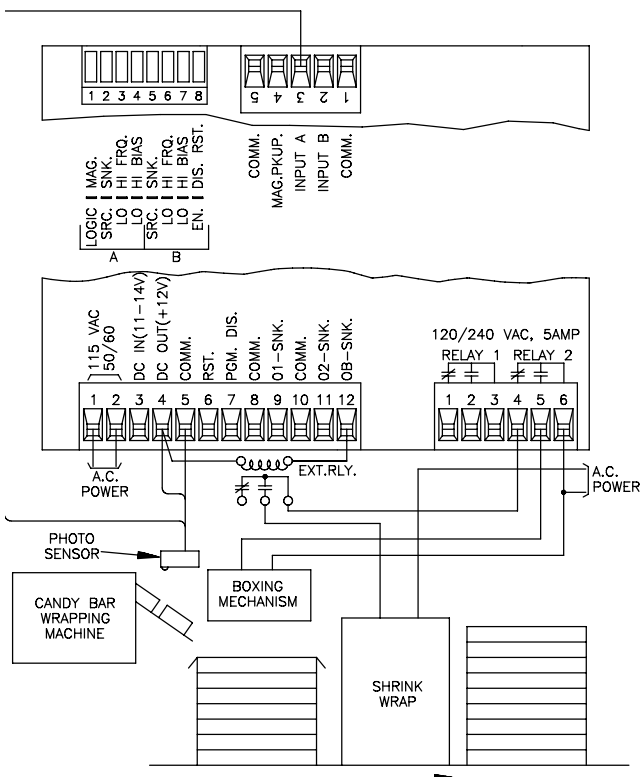


TYPICAL BATCH COUNTER APPLICATIONS (Cont'd)

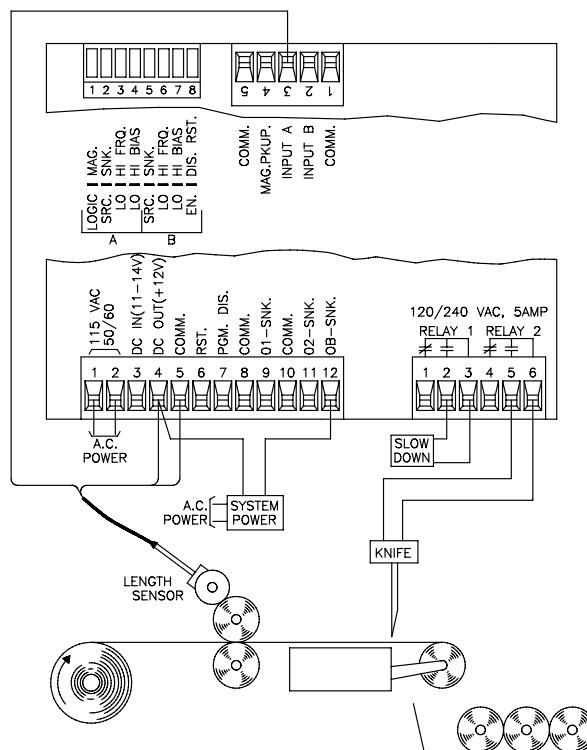
CANDY BAR PACKAGING SYSTEM



A typical batching application, shown above, requires two separate control functions. The first counts the production items in process (*candy bars*) and then provides a relay control output to the sealing mechanism (when 24 candy bars are to be sealed in a distribution box and placed on a stack). The Batch Counter of the GEMINI 3300 advances each time a distribution box is sealed. Another packaging mechanism is required to activate when 10 distribution boxes are stacked, ready to be shrink-wrapped with clear plastic. Both the Process and Batch Counters are programmed to reset and Run at the two preset numbers. For the shrink-wrap mechanism system to operate properly, it must not activate until the Process relay deactivates after the 24th bar of the 10th box. To achieve this, the power is fed to the Process Relay 2 common and the normally closed contact is connected to the common of the Batch Relay. When the process Output 2 fires, it disconnects power to the Batch relay which fires simultaneously with the Process Relay at the end of a batch. The batch timed output must be equal to the amount of time required for the shrink-wrap process plus the time required for the Process Output 2. The Process Output 2 energizes for 0.50 seconds and the required shrink-wrap process time is 4 seconds, so the batch timed output required is 4.50 seconds. The times are easily programmed via the front panel. The GEMINI 3300 allows the operator to maintain a watch on the Process, Batch, or Total Counts by simply pressing the "+/-" button to sequence the display to the desired count.

LENGTH PROCESSING UTILIZING SCALE FACTOR

Many times in web type processes it is necessary to scale the input to reflect the desired engineering units. In this application, a plastic bag webbing process is being measured with a 10 pulse LSC sensor (*length sensor and one foot circumference wheel*). The output of the LSC is the input to the GEMINI 3300. The requirements are for a readout and control in 10ths of yards. Thus for every additional yard, the display must increment by 10 counts. A decimal point in the 10ths position will be programmed to provide the desired display of 1.0 for each yard the process advances. In order to scale the existing input of 30 pulses per yard to the desired display reading of 10 (without decimal point), the scale multiplier is programmed as 0.1 and the scale factor is programmed to 3.3333. After this has been accomplished, the process control Output 2 is programmed to energize every 40.5 yards to cut the web in proper lengths. Ten yards before cut, process control Output 1 is to activate to provide a slow-down output. The Batch counter, which advances 1 count for each cut, can be set to stop the entire process at a desired production run limit. In this system, the production records require total yards produced every 24 hours regardless of the particular run in progress. The totalizing counter of the GEMINI 3300 solves the requirement. The unit can be programmed so that the Reset Button resets only the Process and Batch Counters and not the Total Count. This would prevent reset of the Total Count when setting up for each new production run. The daily tally of the total can be accomplished by a manual reading. To reset the total count, a count value of zero can be loaded into the Total Counter (using "Counter Load Value"), or a reset command can be issued if using the serial communication capability of the GEMINI 3300.



ORDERING INFORMATION

MODEL NO.	DESCRIPTION	W/20 mA CURRENT LOOP	PART NUMBERS
			115/230 VAC
GEM33	Gemini 3300	No	GEM33060
		Yes	GEM33160
—	Gemini 2000/3300 Relay Board	N/A	RLYBD002
For more information on Pricing, Enclosures, & Panel Mount Kits, refer to the RLC Catalog or contact your local RLC distributor.			