MODEL 332N WATER

The Model 332N Water Batcher is a combination batch controller and coin counter used to deliver water based on quantity, not time. Using a simple switch closure from a coin collector, the instrument counts the number of coins inserted and delivers an equal number of pre-set batches of water. The water meter input circuitry converts pulses or switch closures from the metering device and converts them to engineering units, (i.e. gallons, cubic feet , liters etc.). The batch counter accumulates the metered pulses into preset batches. As each batch is completed, the batch counter resets to zero and another batch is initiated if there is a balance on the coin counter. This process continues until the number of batches delivered equals the number of coins inserted. The batch and coin counters are both 6-digit totalizers allowing deliveries of precise high resolution volumes based on quantity. When the number of batches delivered equals the number of coins inserted, a SPDT (single pole double throw) switch is activated to close a solenoid valve to stop the water flow. The instrument remains in this condition until another coin is inserted. Provisions are included for a external reset to clear the escrow counter or to shut the system down in an emergency.

The total number of batches delivered and the total number of coins inserted are accumulated on different totalizers to improve accountability. The instrument can be connected to a separate stand alone printer (Model 335), or it may be mounted in the enclosure with the Model 332N (model 332NPr) to provide a printout of each transaction. This transaction report may include the time and date, the total number of coins inserted, the number of batches delivered and the total consumption.

All of the instrument parameters and totals are stored in a solid state non-volatile memory that retains the data indefinitely if power is removed. The instrument is housed in a NEMA 4X wall mounted fiberglass enclosure.

Options available includean input circuit to accept the 24 VAC signal from the Slug Buster Coin Collector (Option1). This option can be modified to accomadate other coin collector outputs. Option 2 provides a second pulse conditioned to drive a card or key type system for bulk deliveries, eliminating the need for qan instrument with options B and I.

SIGNAL SOURCES
The instrument is designed to operate with either High Speed Electronic Transmitters and Impulse Contactor (switch closure) type meter transmitters. The type of meter and transmitter used depends on the units to be delivered and the quantity in a batch. The desired batch quantity must be in a multiple of the units from the input signal. In most cases the use of a electronic type transmitter provides high resolution and versatility. The instrument is calibrated to the specified signal source when shipped, it can be changed at any time while in service.

FRONT PANEL

Batch Counter
The batch counter is used to control the size of each batch delivered. A 6 digit LCD read-out shows the quantity consumed up to the preset quantity. When the preset quantity is reached, the counter resets to zero, decreases the coin counter by one starting a new batch. This action continues until the counts on the coin counter reaches zero. The value of each increment and the batch quantity are easily changed at any time.

Coin Counter
A 6 digit red LED display shows the number of coins inserted into the coin mechanism. The input is a simple dry contact closure that advances the counter 1 count each time a coin is inserted. When the first coin is inserted, the solenoid is signaled to open, allowing the delivery to start. Additional coins can be inserted at any time during delivery. The process continues to add 1 to the coin counter each time a coin is inserted and decreasing this count each time a batch is completed. Although this description refers to a coin mechanism, any type of a money changer that outputs a contact closure or an approximate solid state signal can be utilized.

Total Batch, Total Coin and Escrow Counters
There are three (3) 6-digit counters that totalize the accumulated total number of batches delivered, the total number of coins inserted and the balance of the coins left in escrow. This feature provides a high degree of accountability.
To display the various counters press the DSP button.

SPECIFICATIONS
ENCLOSURES
Model 332N - 8" wide x 10" long x 6" deep NEMA-4X fiber glass wall mount enclosure.
Model 332NPr – 12" wide x 14" long x 8" deep NEMA-4X fiber glass wall mount
DISPLAYS
Batch Counter - a 6 digit, 0.3" high, reflective LCD
Total Coin Counter - a 6 digit, 0.56" high, red LED
Total Batch and Escrow Counter—same as above
INPUT POWER
117 VAC +- 10% (220 VAC available)
OPERATING TEMPERATURE
+32 F (0 C) to +130 F(+54 C)
MEMORY RETENTION
Non-volatile EEPROM retains all programmed information when power is removed or interrupted.
CONTROL OUTPUT
SPDT relay, rated 3 amps, resistive at 117 VAC or 5 amps resistive at 24 VDC.
When used with a solenoid a surge suppressor must be placed across the solenoid)
CONTROL INPUTS
Remote Reset Switch – SPST (NO), close to reset coin counter to zero.
Coin Switch – SPST (NO) - closes each time a coin is deposited. A solid state switch with a open collector configuration, may be used.
SECURITY
Instrument provides an electronic lock to eliminate tampering.
METER INPUTS
Switch Inputs - SPST, 50 HZ, maximum
Solid State - Open Collector, 100 HZ, maximum

Option 1—Slug Buster Input
Accepts a 24 VAC pulse from the Slug Buster Coin Acceptor.
The input may be modified to accept other inputs.
Option 2 - Conditioned pulse output to drive coin or key system. Specifications are the same as the Control Input relay.

METER INPUTS
Switch Inputs - SPST, 50 HZ, maximum
Solid State - Open Collector, 100 HZ, maximum

TERMINAL STRIP IDENTIFICATION
1	Coin Switch Input
2	Coin Switch Input
3	NO Output Switch
4	C Output Switch
5	NC Output Switch
6	Blank
7	Remote Reset Contact Input
8	Remote Reset Contact Input
9	Slug Buster Input *
10	Slug Buster Input *
11	Blank
12	Meter Cable Shield
13	+12VDC to Meter Transmitter (if required)
14	Signal In From Meter Transmitter
15	Common to Meter Transmitter
27	Output Contact Closure to Bulk System
28	Output Contact Closure to Bulk System
1A	AC Ground
2A	117 VAC Input
3A	117 VAC Input
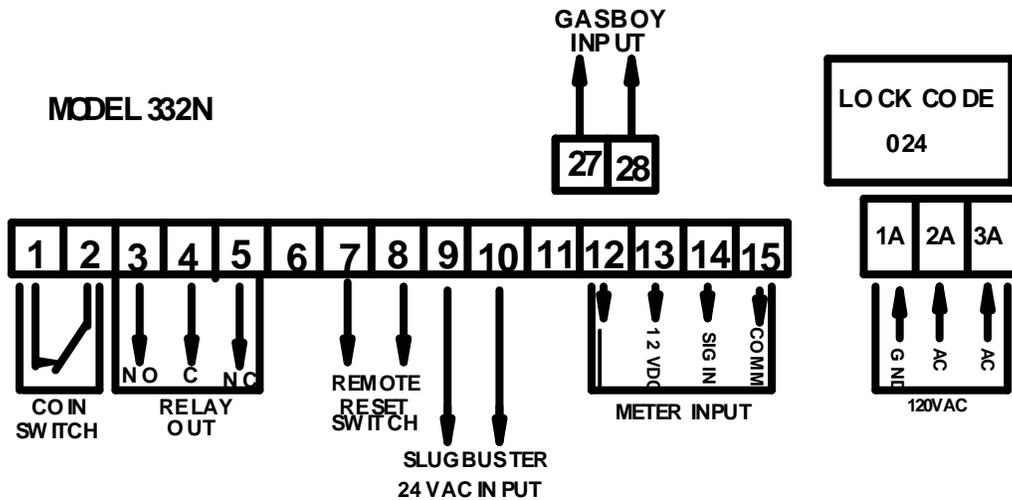
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