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NOTICE OF APPROVAL
AVIS D'APPROBATION

E-155

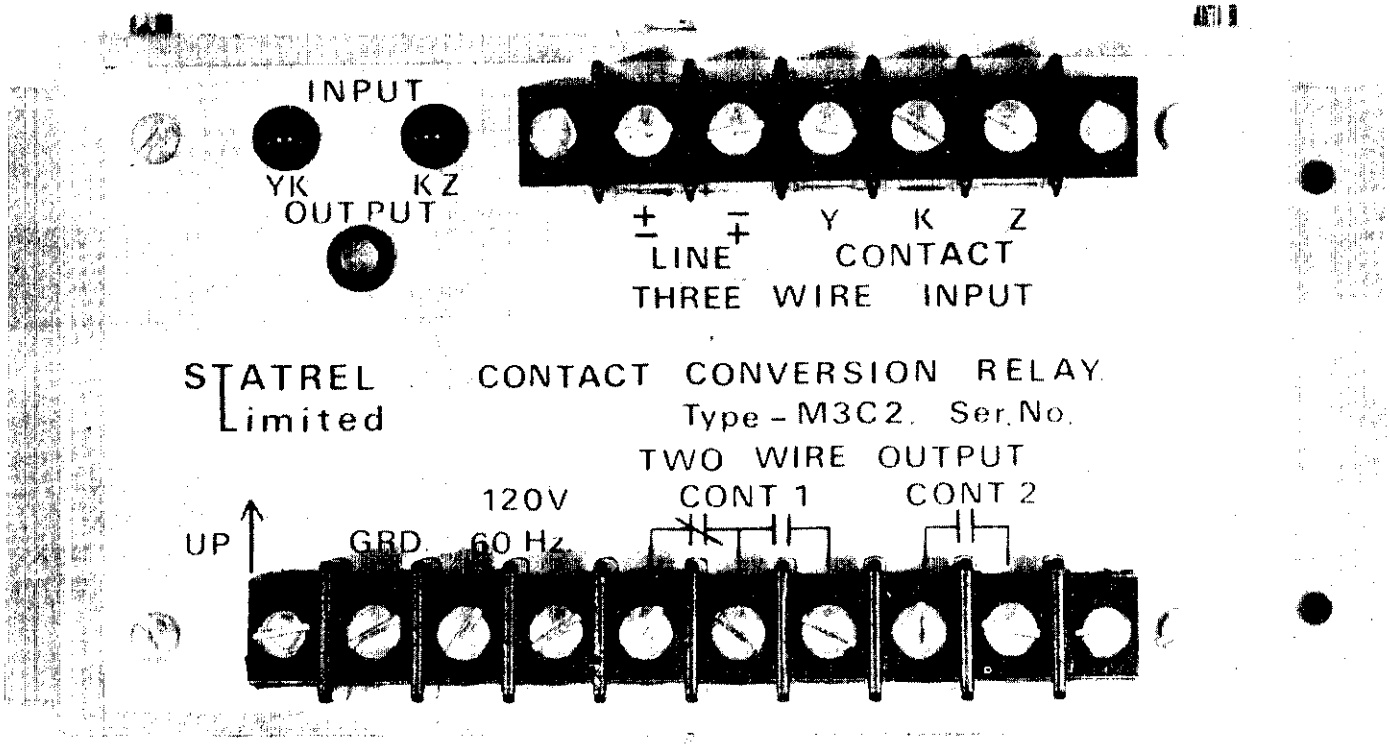
Ottawa, August 18, 1977

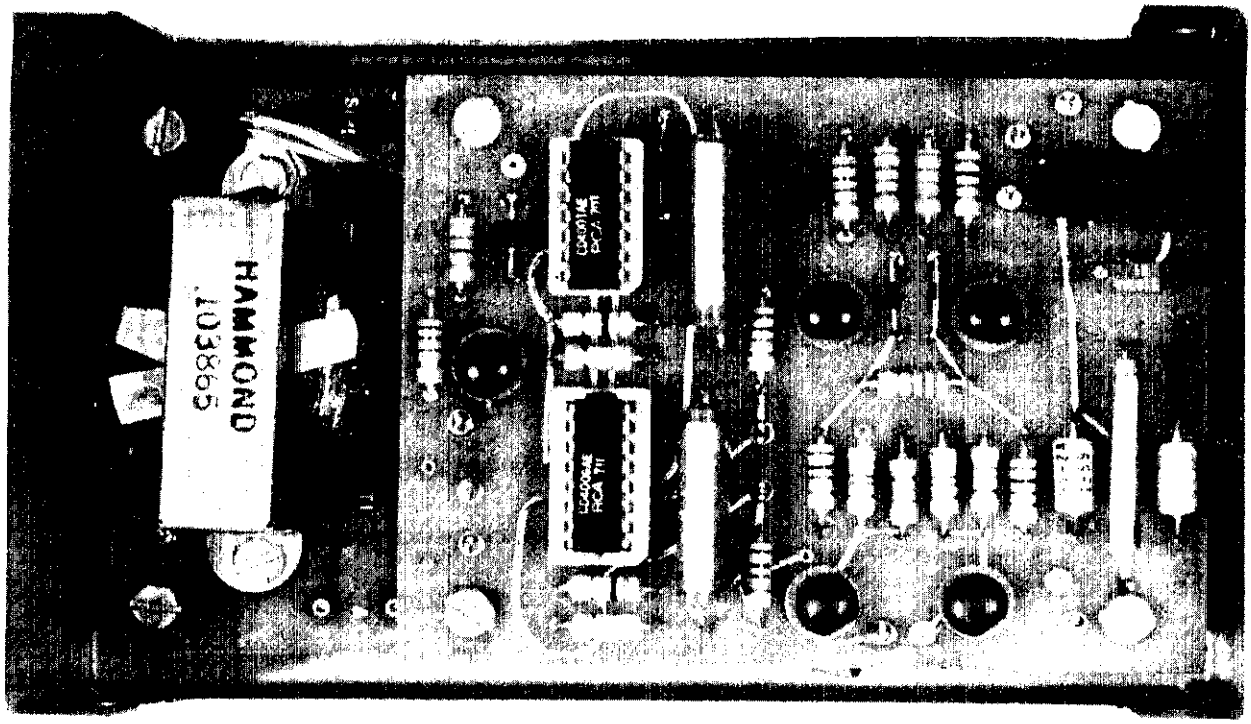
STATREL TYPE M3C2 CONTACT CONVERSION RELAY

Input Signal:	(1)	Alternating polarity DC voltage, operation level	±8 VDC MIN ±50 VDC MAX
		Transmission line loop resistance	10 k ohms max.
		Insulation withstand voltage (signal input to case)	2000 VAC (1 minute)
	(2)	Contact input	SPDT (3 wire) (dry contact)
		Contact lead resistance	1 k ohm max.
		Recommended maximum distance between initiator and M3C2 relay	250 feet

Output Contacts:	Form	One Form "C" contact One Form "A" contact	
	Type	Mercury Wetted (HGJ2MT)	
	Rating	500 volts AC or DC max. 2 amperes max. 100 VA max. (resistive load)	
	Life Expectancy	Several billion operations (contact protection provided)	
	Insulation withstand voltage		
	contacts to case	1000 VAC	(1 Minute Test)
	contact to contact	1000 VAC	

Input/Output Pulse Ratio	1:1
Voltage Applied to Input Contacts	12 VDC
Power Supply	115 VAC ±10% 3.5 A
Operating Temperature Range	-20° to $+55^{\circ}$C
Input Pulse Rate	5 per second max.
Input Pulse Indication	2 light emitting diodes (Red)


INPUT
YK
KZ
OUTPUT
+ LINE −
− +
Y K Z
CONTACT
THREE WIRE INPUT
STATREL Limited
CONTACT CONVERSION RELAY
Type - M3C2. Ser.No.
TWO WIRE OUTPUT
120V 60 Hz
CONT 1
CONT 2
UP
GRD


HAMMOND
103865

Output Pulse Duration	120 milliseconds (approx.)
Output Pulse Indication	1 light emitting diode (yellow)
Mounting	Vertical Surface*

*Must be mounted upright within ±15° of vertical.

Description

The M3C2 Contact Conversion Relay is designed to convert a "three-wire metering" pulse train to a "two-wire metering" pulse train. The relay maintains a one-to-one pulse translation. In other words, if a three-wire pulse recorder were connected to record the input signal to the M3C2 relay it would record the same number of pulses as a two-wire recorder connected to the output of the relay. A typical application of the M3C2 relay is to use it to interface a three-wire pulse train, where each pulse represents a number of kilowatt hours, and a transducer which converts a two-wire pulse train to a DC voltage, which when supplied to a suitable recorder, would provide an indication of average power, i.e. kW.

As well as converting a dry contact three-wire input signal to a two-wire output, the M3C2 relay is equipped to convert alternating polarity DC signals to a two-wire output.

Provisions shall be made to effectively seal the cover, and the terminals to prevent access to the working parts and the connections.

Approval granted to:

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