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## G-9894 SERIES SOLID STATE ISOLATION RELAYS INSTRUCTION INFORMATION

### GENERAL DESCRIPTION

The G-9894 Solid-State Isolation Relay is used in KWH metering schemes where additional contacts are required and adequate surge protection exists.

The G-9894 provides three KYZ outputs from a single set of KYZ input contacts. This input is isolated from the outputs by a minimum of 1500V.

A red LED indicates when the "Y" contacts are closed on the outputs and a green LED indicates that the "Z" contacts are closed.

The input contacts key 5.5mA at 12V into the solid-state switch network. The output contacts are rated at 350V peak with load currents up to 100mA. Maximum keying speed is 50Hz at 3000ppm with 10% delay distortion. The G-9894-AC includes an AC power supply. The G-9894-DC includes a power resistor and zener diode for DC operation.



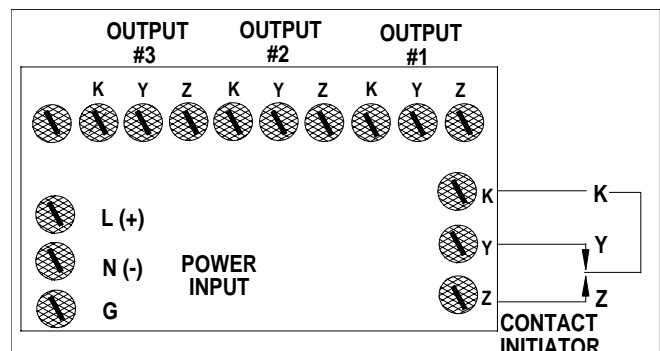
### INSTALLATION

#### Input Connections:

The Z-lead and Y-lead of the contact initiator are connected directly to the input terminals as in the diagram below. The unit is not polarity sensitive for either the AC or the DC unit.

#### Output Connections:

The Z-lead and Y-lead of the G-9894 connect directly to the inputs on the device driver. The G-9894 outputs are not polarity sensitive; however, the driven device may be!



## SPECIFICATIONS

SIZE: 6.5"L x 3.65"W x 1.75"H (without the cover),  
add 0.5" for the cover.

MOUNTING DIMENSIONS: 2.50" X 6", 3/16"D holes.

TEMPERATURE RANGE: -40°C to +85°C.

RELAY CONTACTS: 3 KYZ, Rated 350Vp, 100mA.

### INPUT VOLTAGES:

AC Unit: 120-240Vac

DC Unit: 12/24/48/125Vdc as marked.

SCREW TERMINAL SIZE: 5-40 screw, accommodat-  
ing up to 0.3" lug for #16 AWG wire.

### REPLACEABLE PARTS LIST, G-9894-AC and G-9894-DC

CIRCUIT SYMBOL	DESCRIPTION	STOCK#
LE1	LED, Red 521-9247	010000
CR1-CR3	Diode, IN4004	010020
R1	FV (see schematic)	
CR4	Zener Diode, IN5349B	010060
LE2	LED, Green 521-9251	010150
C1	Capacitor, EL, 470uf, 50V AX	020115
C2	Capacitor, TAN., 1uf, 35V TAP	030150
VR1	I.C., MC7815CT	080960
U1-U6	I.C., TS117	081352
R2	Resistor, Comp., 1/4W, 2.2K	130140
T1	Transformer, DSW-224, Stancor	150060



### DA-TEL RESEARCH COMPANY, INC. Tomorrow's Telemetry Today

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*\*Equipment and/or components purchased through Da-Tel but manufactured by other companies are covered under the warranties of those manufacturers.*

#### NOTICE

As of the date of this printing, the specifications for the G-9894 in this Instruction Information sheet apply to all G-9894 Solid-State Contact Multipliers, except as indicated. Because all Da-Tel products are continually being refined and improved, these specifications are subject to change without notice.