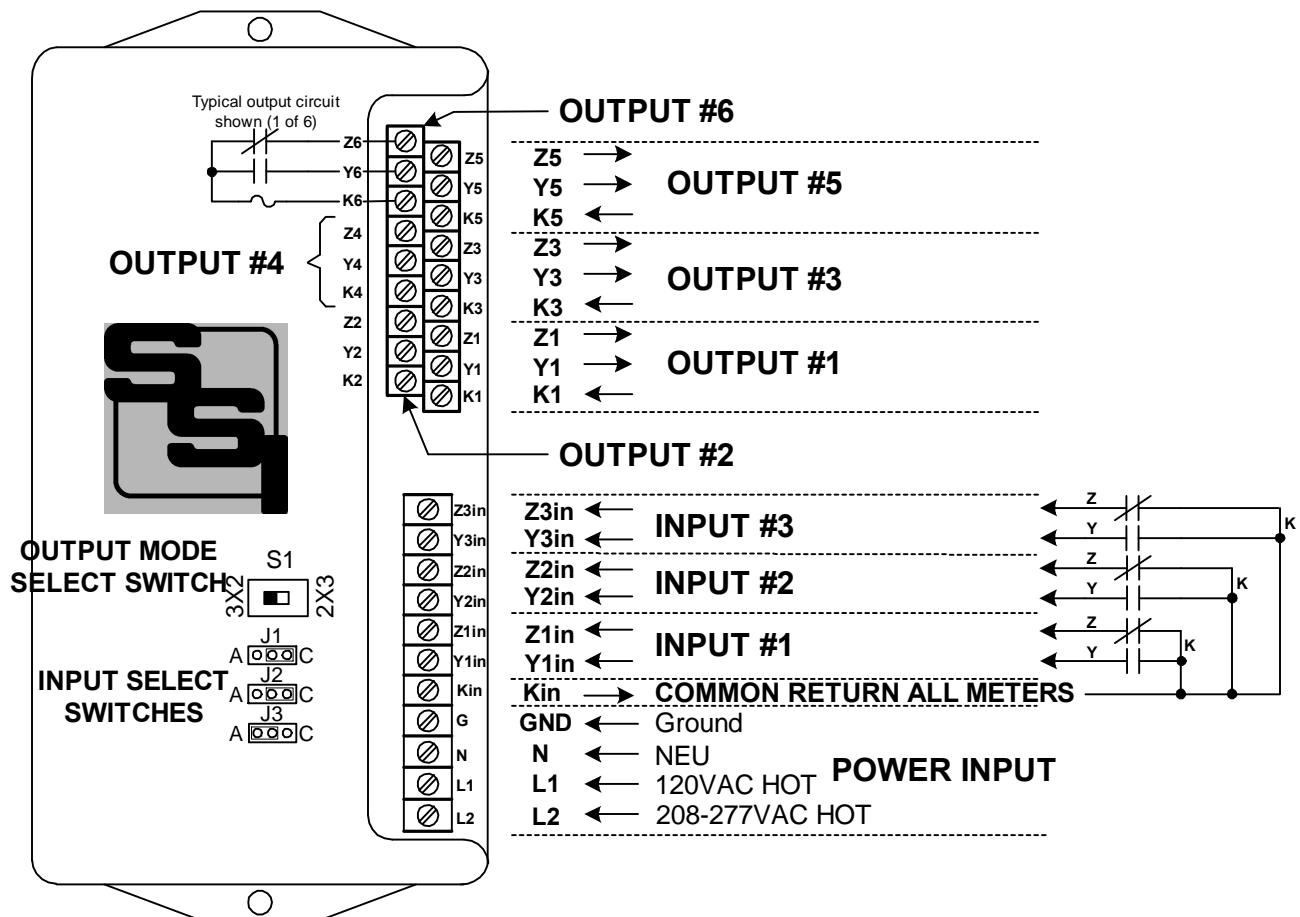


# INSTRUCTION SHEET

## SPR-36 PULSE ISOLATION RELAY



**MOUNTING POSITION** - The SPR-36 may be mounted in any position since it uses solid state relays.

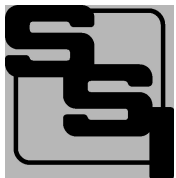
**POWER INPUT** - The SPR-36 is powered by an AC voltage of 120VAC, or between 208 and 277VAC. For 208 thru 277VAC, connect the AC line's "hot" wire to the **L2** terminal. For 120VAC, connect the AC line's "hot" wire to the **L1** terminal. The AC line's "neutral" wire should be connected to the **N** terminal. Connect the **GND** terminal to the electrical system ground. If Neutral does not exist at the meter, connect both NEU and GND to Ground.

**PULSE INPUTS** - Connect the K terminal of each meter supplying pulses to the SPR-36's Kin terminal. Form C Input: Connect the Yin and Zin input terminals to the Y and Z terminals of the respective meters. Form A Input: Connect the Yin input terminal to the Y terminal of the respective meter.

**INPUT TYPE SELECTION** - The SPR-36's inputs may be configured as either 2-Wire (Form A) or 3-Wire (Form C). Selector Jumper J1 selects the configuration for INPUT #1. Selector Jumper J2 sets the configuration for INPUT #2, Etc. Place the Jumper between the LEFT and CENTER pin for a Form A input or between the RIGHT and CENTER pin for a Form C input.

**FUSES** - The fuses are type 3AG (AGC) and may be up to 1/10th Amp in size. Six 1/10 Amp fuses (F1-F6) are supplied standard with the unit unless otherwise specified.

**OUTPUTS** - Six three-wire isolated outputs are provided on the SPR-36, with output terminals K1, Y1 & Z1 through K6, Y6 & Z6. Outputs are rated at 250VAC/VDC @ .1 Amp. Arc suppression for the contacts of the solid state relays is provided internally. See reverse side for setting output configuration.



## SOLID STATE INSTRUMENTS

a division of Brayden Automation Corp.

6230 Aviation Circle, Loveland, Colorado 80538

Phone: (970)461-9600

E-mail: support@brayden.com

## USING THE SPR-36:

**CHOOSING THE OUTPUT MODE:** The SPR-36 has two output modes. These are the "Three by Two" mode (**3X2**) and the "Two by Three" mode (**2X3**). The mode is selected by placing Switch **S1** in the desired position. Moving the switch to the left side sets the SPR-36 in the 3X2 mode. Moving the switch to the right side sets the SPR-36 in the 2X3 mode.

**3X2 MODE:** The **3X2** mode assigns TWO outputs to each of the three inputs. In this mode, Input #1 operates Outputs #1 and #2; Input #2 operates Outputs #3 and #4; Input #3 operates Outputs #5 and #6.

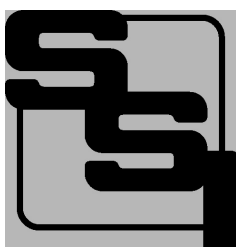
**2X3 MODE:** The **2X3** mode assigns THREE outputs to each of the first two inputs. In this mode, Input #1 operates Outputs #1, #2, and #5; Input #2 operates Outputs #3, #4 and #6. Input #3 is not used.

**LED OUTPUT INDICATORS:** The SPR-36 includes a pair of high-brightness LED's for each output - one Red and Green. This separate set of LED's allows the installer and/or user to monitor each individual output's status without any instruments or tools. When the Red LED is on, the K-Y switch is closed and the K-Z switch is open. When the Green LED is on, the K-Z switch is closed and the K-Y switch is open.

**LED INPUT INDICATORS:** The SPR-36 has a pair of high-brightness LED's for each input - one Red and Green. These LEDs, when on, indicate a closure of the K-Y (Red) and/or K-Z (Green) output terminals from the meter(s). This capability allows the installer and/or user to quickly monitor each meter's pulse output and confirm that pulses are being received by the SPR-36 relay. Second, the installer or user can easily verify that upon each incoming pulse, the inputs' respective outputs are operating.

**WARRANTY:** Solid State Instruments Div. of BRAYDEN AUTOMATION CORP, ("SSI/BAC") offers a limited warranty to the original owner of the product purchased that the product shall be free of defects resulting from faulty manufacturing for a period of one (1) calendar year from the date of purchase. SSI/BAC makes no warranties regarding the satisfactory performance, merchantability, or fitness for any particular purpose for the product. During the warranty period, SSI/BAC will, at its option, repair or replace, at no charge, any defective component or components, provided the defective product is returned freight prepaid to SSI/BAC. All returned products must be accompanied by a R.M.A. (return material authorization) number which may be obtained by calling BAC/SSI. Included with the product must be a clear description of the nature of the failure along with any supporting data test information. SSI/BAC's sole obligation under this limited warranty is limited to the repair or replacement of defective product and SSI/BAC shall not, in any event, be liable to the purchaser, his assignee, or any third party, for any incidental or consequential damages, of any kind resulting from the use or possession of these products. If you have questions, need product support or would like to request an RMA number, contact us at the numbers below or e-mail us at [support@solidstateinstruments.com](mailto:support@solidstateinstruments.com).

**LIFETIME TECH SUPPORT:** Every SSI relay includes FREE lifetime technical support. Call us at 1-888-BRAYDEN (888-272-9336) for information or applications assistance.

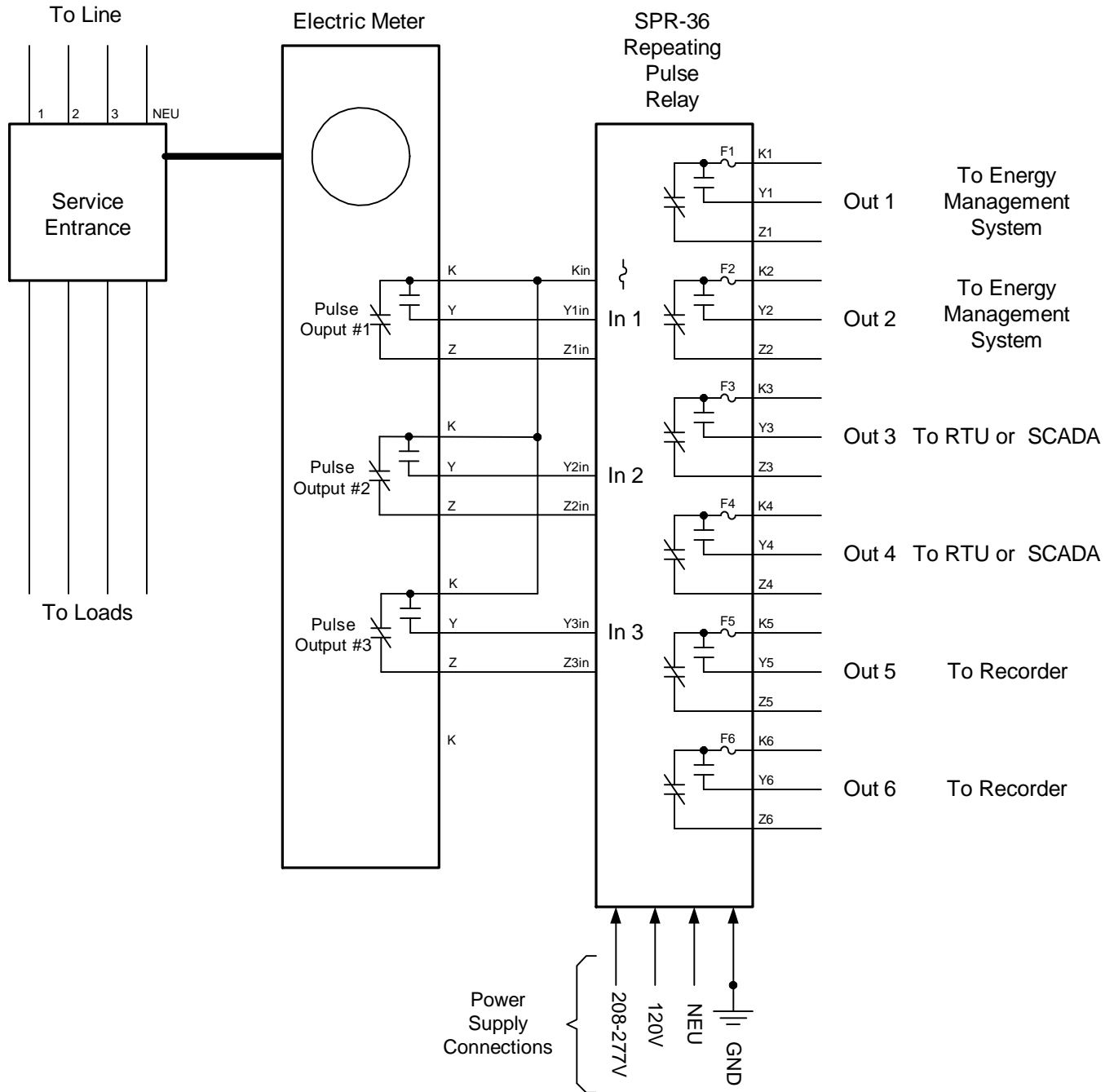


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*"We're all about K, Y and Z"*

# SPR-36 Wiring Diagram



SPR-36WiringDiagram.vsd

SPR-36 Hex Repeating Pulse Relay Wiring Diagram		REVISIONS	
		NO.	DATE
DATE ORIGINAL	SCALE		
1/7/2021	N/A		
LATEST REVISION	JOB NO.	CHECKED	DRAWN
			WHB

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