

Sifam Tinsley Contender Series Panel-Mounted Meters



PK-260-240-LALA

Contender Series short-scale moving iron and moving coil panel meters feature a rugged design for use in demanding environments. Models measure AC current, AC voltage, DC current, DC voltage, and frequency. These meters are housed in molded polycarbonate cases suitable for surface mounting.

Contender Series meters feature center-cored, self-shielding moving coil movements using pivots, hairsprings and spring jewels. The bottom jewel is oil-filled to provide damping, while the top is spring-damped for resilience.

All DC voltmeters are 1000 Ω /volt, while millivolt meters are designed with 5 ma/50 mV resistance. All voltmeters are manufactured with internal voltage dropper resistors.

Frequency meters utilize a 1 mA/35 Ω movement driven by an EMC hard frequency conversion circuit.

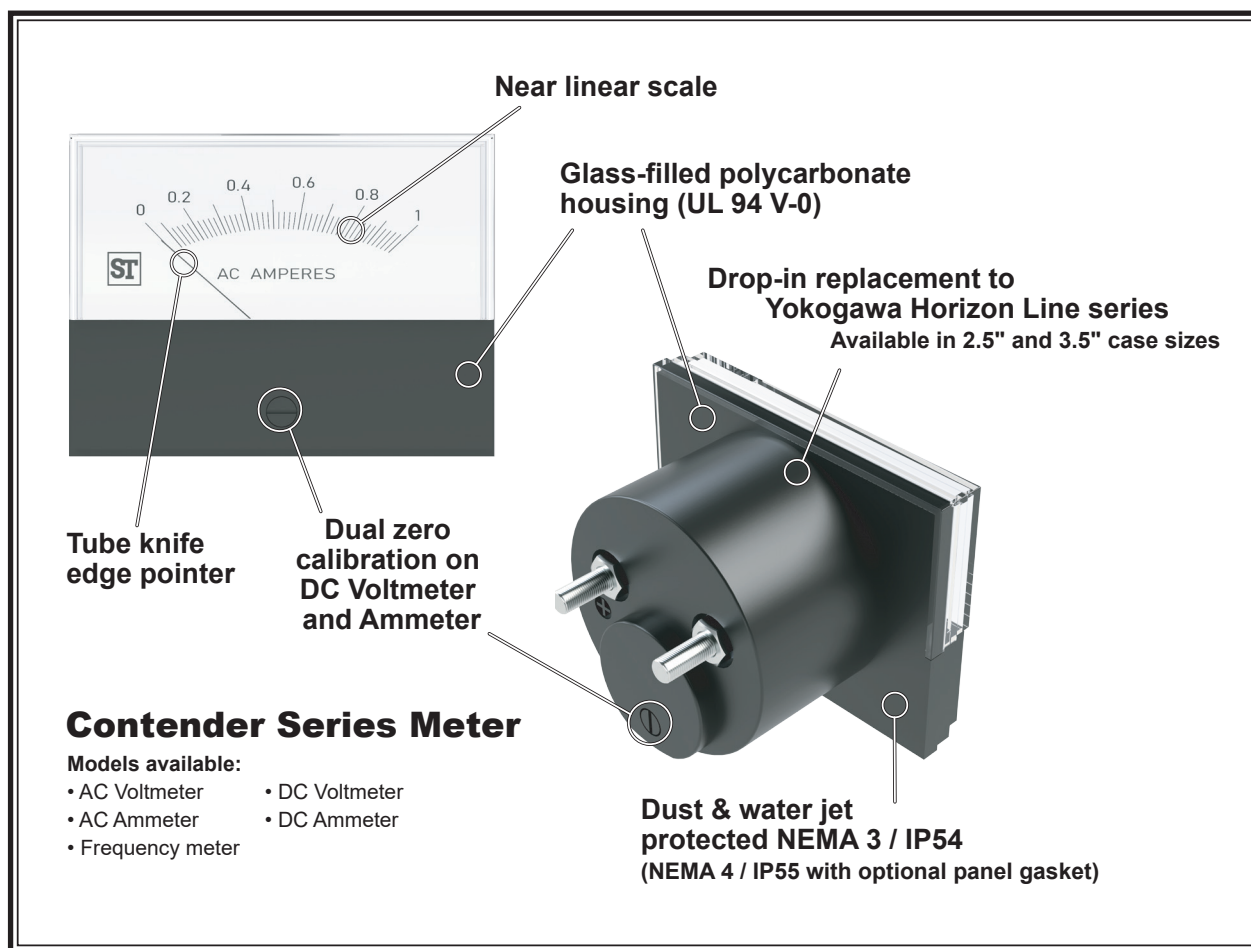
Standard dials are matte white with black printed scales and a tubular black knife-edge pointer balanced within 1% of scale length. They feature a highly repeatable flattened scale shape, ensuring consistently accurate measurement.

Features

- Available in two ANSI standard case sizes – 2.5 in and 3.5 in
- Surface mounting
- High torque pivot and jewel movements
- Rear zero adjuster on moving coil meters
- AC meters provide true RMS measurement
- Near-linear scale
- Glass-filled polycarbonate housing (UL 94 V-0)
- Tube knife-edge pointer
- Withstands high levels of shock, vibration, dirt and humidity
- Dust and water jet protected NEMA 3/IP54 from the front. NEMA 4/IP55 achieved with optional panel gasket accessory

Applications

- Switchgear
- Distribution systems
- Control panels
- Embedded generation
- Energy management
- Building management
- Utility power management
- Process control
- Motor monitoring



Sifam Tinsley Contender Series Panel-Mounted Meters



Sifam Tinsley Contender Series Panel-Mounted Meters General Specifications

<i>Electrical</i>	
Maximum Terminal Voltage to Ground	850 V peak
Dielectric Withstand Test	2600 V for 1 minute (IEC 414)
<i>Scale and Pointer</i>	
Pointer	Tube knife - edge pointer, 90° deflection
<i>Scale Characteristics</i>	
Scale Division	Coarse / fine
Scale Length	2.5-in models: 1.93 in [49.03 mm] 3.5-in models: 2.25 in [57.22 mm]
<i>Mechanical</i>	
Case	Black molded polycarbonate, flame retardant and drip-proof as per UL 94 V-0
Front Window	Polycarbonate (shatterproof and transparent)
Position of Use	Vertical ±5%
Mounting	Round 4-hole mounting studs (4-40 UNC) on panel ≤ 0.39 in [10 mm] thick Torque 4 lb•in [0.4 N•m]
Cutout Size	2.16 in [5.49 cm]
<i>Connections</i>	
Terminals	10-32 UNF, washer 10-32 UNF (recommended lug M5 ring type) Terminal Torque 13 lb•in [1.5 N•m]
<i>Environmental</i>	
Climatic Suitability	Climate category II as per IEC 60051 (climatic class 3 according to VDE/VDI 3540)
Operating Temperature	0 to 40°C [32 to 104°F]
Storage Temperature	-20 to +55°C [-4 to +131°F]
Humidity	25% to 80% nominal range of use (Maximum 80% for temperatures up to 31 °C [87.8 °F] decreasing linearly to 50% at 40 °C [104 °F])
Installation Location	Indoor
NEMA Rating	NEMA 3 (IP54) (NEMA 4 (IP55) with optional gasket)
Maximum Altitude	2000 m [6561.68 ft]
Shock Resistance	15 g for pulse duration of 11 ms
Vibration Resistance	ANSI C39.1 cl. 5. 13
External Magnetic Field	Max 0.5 mT (0.4 kA/m)
<i>Applicable Standards</i>	
Terminal Bolts/Leads	DIN 46200 / 46282
Safety Requirements and Protective Measures	IEC 529, EN/IEC 61010-1
Performance Specifications For Direct Acting Indicating	IS 1248 ANSI C39.1 1981 EN/IEC 60051
UL Compatibility	UL 94 V-0
Agency Approvals	UL Recognized File E471457, cCSAus File 263805, CE To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page.

Sifam Tinsley Contender Series Panel-Mounted True RMS AC Ammeters

**PK-260-240-LALA****PK-260-340-LSTM**

Sifam Tinsley Contender Series Panel-Mounted True RMS AC Ammeters Selection Guide

Part Number	Price	Size (in [mm])	Rating (AC)	Display Scale	Input Type	Frequency Rating	Accuracy	Overload Rating	Fuse	Burden	Movement Type	Drawing					
<u>PK-260-240-LALA</u>	\$28.50	2.5 [63.5]	1 A	0-1 A AC	Self- contained	50/60 Hz	±1.5% at 10 to 100% of full scale deflection	1.2 x continuous	1 A UL/CSA approved fuse with voltage rating no less than voltage of current being measured	0.5 VA	Pivot and jewel (moving iron)	<u>PDF</u>					
<u>PK-260-340-LALA</u>	\$31.00	3.5 [88.9]	1 A	0-1 A AC					<u>PDF</u>								
<u>PK-260-240-LSLS</u>	\$28.50	2.5 [63.5]	5 A	0-5 A AC					5 A UL/CSA approved fuse with voltage rating no less than voltage of current being measured			<u>PDF</u>					
<u>PK-260-340-LSLS</u>	\$31.00	3.5 [88.9]	5 A	0-5 A AC					<u>PDF</u>								
<u>PK-260-240-MTMT</u>	\$28.50	2.5 [63.5]	10 A	0-10 A AC					10 A UL/CSA approved fuse with voltage rating no less than voltage of current being measured			<u>PDF</u>					
<u>PK-260-340-MTMT</u>	\$31.00	3.5 [88.9]	10 A	0-10 A AC					<u>PDF</u>								
<u>PK-260-240-LSNT</u>	\$28.50	2.5 [63.5]	5 A	0-50 A AC	Transformer rated				50/60 Hz			±1.5% at 10 to 100% of full scale deflection	1.2 x continuous	CT circuits should not be fused	0.5 VA	Pivot and jewel (moving iron)	<u>PDF</u>
<u>PK-260-340-LSNT</u>	\$31.00	3.5 [88.9]	5 A	0-50 A AC													<u>PDF</u>
<u>PK-260-240-LSPK</u>	\$28.50	2.5 [63.5]	5 A	0-100 A AC													<u>PDF</u>
<u>PK-260-340-LSPK</u>	\$31.00	3.5 [88.9]	5 A	0-100 A AC													<u>PDF</u>
<u>PK-260-240-LSRL</u>	\$28.50	2.5 [63.5]	5 A	0-200 A AC													<u>PDF</u>
<u>PK-260-340-LSRL</u>	\$31.00	3.5 [88.9]	5 A	0-200 A AC													<u>PDF</u>
<u>PK-260-240-LSSC</u>	\$28.50	2.5 [63.5]	5 A	0-400 A AC													<u>PDF</u>
<u>PK-260-340-LSSC</u>	\$31.00	3.5 [88.9]	5 A	0-400 A AC													<u>PDF</u>
<u>PK-260-240-LSSN</u>	\$28.50	2.5 [63.5]	5 A	0-800 A AC													<u>PDF</u>
<u>PK-260-340-LSSN</u>	\$31.00	3.5 [88.9]	5 A	0-800 A AC													<u>PDF</u>
<u>PK-260-240-LSTE</u>	\$28.50	2.5 [63.5]	5 A	0-1600 A AC													<u>PDF</u>
<u>PK-260-340-LSTE</u>	\$31.00	3.5 [88.9]	5 A	0-1600 A AC													<u>PDF</u> <u>PDF</u>
<u>PK-260-340-LSTM</u>	\$31.00	3.5 [88.9]	5 A	0-2000 A AC													<u>PDF</u>

Sifam Tinsley Contender Series Panel-Mounted True RMS AC Voltmeters

**PK-260-244-PZPZ****PK-260-344-PZSJ**

Sifam Tinsley Contender Series Panel-Mounted True RMS AC Voltmeters Selection Guide

Part Number	Price	Size (in [mm])	Rating (VAC)	Display Scale	Input Type	Frequency Rating	Accuracy	Overload Rating	Fuse	Burden	Movement Type	Drawing
<u>PK-260-244-PZPZ</u>	\$28.50	2.5 [63.5]	150	0-150 VAC	Self-contained	50/60 Hz	±1.5% at 10 to 100% of full scale deflection	1.2 x continuous	Direct connection: UL/CSA approved 1 A fast-acting fuse with breaking capacity of 35 A or greater, voltage no less than highest circuit voltage connected to meter. PT connection: Fuse potential transformer (PT) to NEC/CEC requirements.	4.5 VA	Pivot and jewel (moving iron)	<u>PDF</u>
<u>PK-260-344-PZPZ</u>	\$31.00	3.5 [88.9]										<u>PDF</u>
<u>PK-260-244-RXRX</u>	\$28.50	2.5 [63.5]	300	0-300 VAC	Self-contained							<u>PDF</u>
<u>PK-260-344-RXRX</u>	\$31.00	3.5 [88.9]										<u>PDF</u>
<u>PK-260-344-PZRX</u>	\$31.00	3.5 [88.9]	150	0-300 VAC	Transformer rated							<u>PDF</u>
<u>PK-260-244-SJSJ</u>	\$28.50	2.5 [63.5]	600	0-600 VAC	Self-contained							<u>PDF</u>
<u>PK-260-344-SJSJ</u>	\$31.00	3.5 [88.9]										<u>PDF</u>
<u>PK-260-244-PZSJ</u>	\$28.50	2.5 [63.5]	150	0-600 VAC	Transformer rated							<u>PDF</u>
<u>PK-260-344-PZSJ</u>	\$31.00	3.5 [88.9]										<u>PDF</u>

Sifam Tinsley Contender Series Panel-Mounted Frequency Meters

**PK-264-250-AJAJ****PK-264-350-ANAN**

Sifam Tinsley Contender Series Panel-Mounted Frequency Meters Selection Guide

Part Number	Price	Size (in [mm])	Rating	Display Scale	Center Scale	Input Type	Accuracy	Voltage Input Range	Fuse	Burden	Movement Type	Drawing
<u>PK-264-250-AJAJ</u>	\$28.50	2.5 [63.5]	120 VAC	45-65 Hz	55Hz	Self- contained or transformer rated	±0.5% of end scale value	±15%	Direct connection: UL/CSA approved 1 A fast-acting fuse with breaking capacity of 35 A or greater, voltage no less than highest circuit voltage connected to meter. PT connection: Fuse Potential Transformer (PT) to NEC/CEC requirements.	4 VA	Pivot and jewel (self- contained)	PDF
<u>PK-264-350-AJAJ</u>	\$31.00	3.5 [88.9]										PDF
<u>PK-264-250-ANAN</u>	\$28.50	2.5 [63.5]		55-65 Hz	60 Hz							PDF
<u>PK-264-350-ANAN</u>	\$31.00	3.5 [88.9]										PDF

Sifam Tinsley Contender Series Panel-Mounted DC Ammeters

**PK-260-200-HFHF****PK-260-324-ECSS**

Sifam Tinsley Contender Series Panel-Mounted DC Ammeters Selection Guide

Part Number	Price	Size (in [mm])	Rating	Display Scale	Input Type	Accuracy	Overload Rating	Fuse	Sensitivity	Calibrated 2-Way Shunt Lead	Movement Type	Drawing
PK-260-200-HFHF	\$28.50	2.5 [63.5]	0-20 mA DC	0-20 mA DC	Self- contained	±1.5% of full scale	1.2x continuous	0.032 A UL/CSA approved fuse with voltage rating no less than voltage of current being measured	N/A	N/A	Pivot and jewel (moving coil)	PDF
PK-260-300-HFHF	\$31.00	3.5 [88.9]										PDF
PK-260-200-HEHE	\$28.50	2.5 [63.5]	4-20 mA DC	4-20 mA DC								PDF
PK-260-300-HEHE	\$31.00	3.5 [88.9]										PDF
PK-260-200-LALA	\$28.50	2.5 [63.5]	0-1 A DC	0-1 A DC				1 A UL/CSA approved fuse with voltage rating no less than voltage of current being measured				PDF
PK-260-200-LSLS	\$28.50	2.5 [63.5]	0-5 A DC	0-5 A DC				5 A UL/CSA approved fuse with voltage rating no less than voltage of current being measured				PDF
PK-260-300-LSLS	\$31.00	3.5 [88.9]										PDF
PK-260-200-MTMT	\$28.50	2.5 [63.5]	0-10 A DC	0-10 A DC				10 A UL/CSA approved fuse with voltage rating no less than voltage of current being measured				PDF
PK-260-300-MTMT	\$31.00	3.5 [88.9]										PDF
PK-260-224-ECNG	\$28.50	2.5 [63.5]	50 mV DC (shunt- rated)	0-20 A DC	Shunt rated	±1.5% of full scale	1.2x continuous	N/A	0.16 kΩ/V	0.035 Ω ¹		PDF
PK-260-324-ECNG	\$31.00	3.5 [88.9]										PDF
PK-260-224-ECNT	\$28.50	2.5 [63.5]	50 mV DC (shunt- rated)	0-50 A DC								PDF
PK-260-324-ECNT	\$31.00	3.5 [88.9]										PDF
PK-260-224-ECPZ	\$28.50	2.5 [63.5]	50 mV DC (shunt- rated)	0-150 A DC								PDF
PK-260-324-ECPZ	\$31.00	3.5 [88.9]										PDF
PK-260-224-ECRL	\$28.50	2.5 [63.5]	50 mV DC (shunt- rated)	0-200 A DC								PDF
PK-260-324-ECRL	\$31.00	3.5 [88.9]										PDF
PK-260-224-ECSC	\$28.50	2.5 [63.5]	50 mV DC (shunt- rated)	0-400 A DC								PDF
PK-260-324-ECSC	\$31.00	3.5 [88.9]										PDF
PK-260-224-ECSF	\$28.50	2.5 [63.5]	50 mV DC (shunt- rated)	0-500 A DC								PDF
PK-260-324-ECSF	\$31.00	3.5 [88.9]										PDF
PK-260-224-ECSS	\$28.50	2.5 [63.5]	50 mV DC (shunt- rated)	0-1000 A DC								PDF
PK-260-324-ECSS	\$31.00	3.5 [88.9]										PDF

Note 1: 2-way lead resistance. Recommend maximum 5.5 ft 14 AWG stranded uncoated copper wire (Class B stranding). Resistance may vary depending on wire gauge, material, and stranding class.

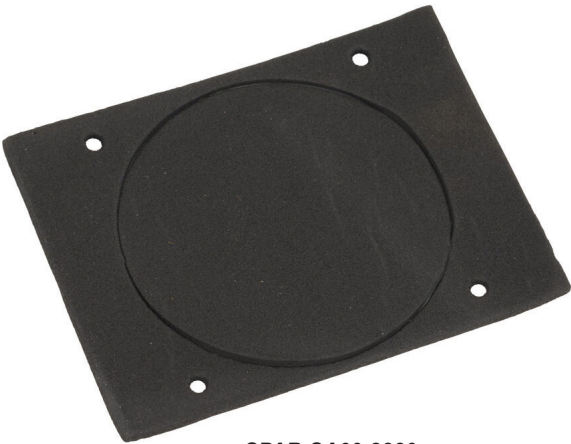
Sifam Tinsley Contender Series Panel-Mounted DC Voltmeters

**PK-260-220-NDND****PK-260-320-SJSJ**

Sifam Tinsley Contender Series Panel-Mounted DC Voltmeters Selection Guide

Part Number	Price	Size (in [mm])	Rating (VDC)	Display Scale	Input Type	Accuracy	Overload Rating	Fuse	Sensitivity	Movement Type	Drawing
PK-260-220-NDND	\$28.50	2.5 [63.5]	15	0-15 V DC	Self- contained	±1.5% of full scale	1.2x continuous	UL/CSA approved 1 A fast-acting fuse with breaking capacity of 35 A or greater, voltage no less than highest circuit voltage connected to meter.	1 kΩ/V	Pivot and jewel (moving coil)	PDF
PK-260-320-NDND	\$31.00	3.5 [88.9]									PDF
PK-260-220-NTNT	\$28.50	2.5 [63.5]	50	0-50 V DC							PDF
PK-260-320-NTNT	\$31.00	3.5 [88.9]									PDF
PK-260-220-PBPB	\$28.50	2.5 [63.5]	75	0-75 V DC							PDF
PK-260-320-PBPB	\$31.00	3.5 [88.9]									PDF
PK-260-220-PZPZ	\$28.50	2.5 [63.5]	150	0-150 V DC							PDF
PK-260-320-PZPZ	\$31.00	3.5 [88.9]									PDF
PK-260-220-SCSC	\$28.50	2.5 [63.5]	400	0-400 V DC							PDF
PK-260-320-SCSC	\$31.00	3.5 [88.9]									PDF
PK-260-220-SJSJ	\$28.50	2.5 [63.5]	600	0-600 V DC							PDF
PK-260-320-SJSJ	\$31.00	3.5 [88.9]									PDF

Sifam Tinsley Contender Series Panel-Mounted Meters Accessories



[SPAR-SA00-2330](#)

Sifam Tinsley Contender Series Panel-Mounted Meters Accessories Selection Guide			
Part Number	Price	Description	Drawing
<u>SPAR-SA00-2330</u>	\$5.00	Gasket, for use with Contender series 2.5-inch analog panel meters.	<u>PDF</u>
<u>SPAR-SA00-2331</u>	\$5.00	Gasket, for use with Contender series 3.5-inch analog panel meters.	<u>PDF</u>

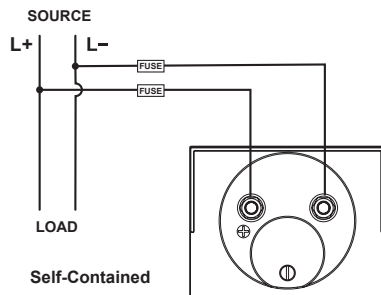
Sifam Tinsley Contender Series Panel-Mounted Meters



Wiring Diagrams

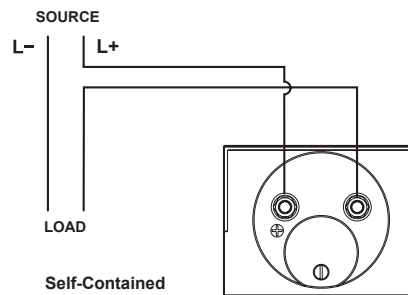
DC Voltmeter

PK-260-220-(NDND, NTNT, PBPB, PZPZ, SCSC, SJSJ)
PK-260-320-(NDND, NTNT, PBPB, PZPZ, SCSC, SJSJ)



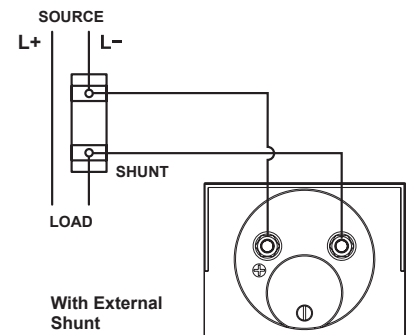
DC Ammeter

PK-260-200-(HFHF, HEHE, LALA, LSLS, MTMT)
PK-260-300-(HFHF, HEHE, LSLS, MTMT)



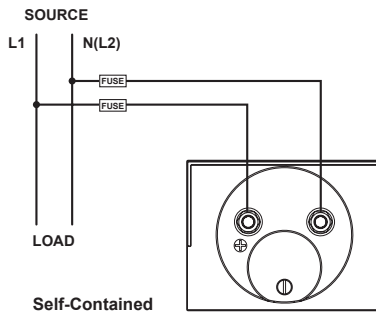
DC Ammeter

PK-260-224-(ECNG, ECNT, ECPZ, ECRL, ECSC, ECSF, ECSS)
PK-260-324-(ECNG, ECNT, ECPZ, ECRL, ECSC, ECSF, ECSS)



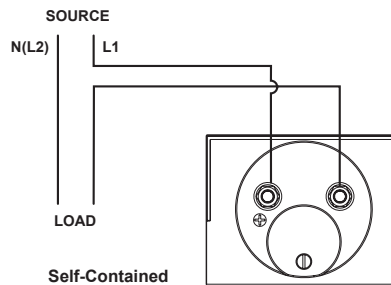
AC Voltmeter

PK-260-244-(PZPZ, RXRX, SJSJ)
PK-260-344-(PZPZ, RXRX, SJSJ)



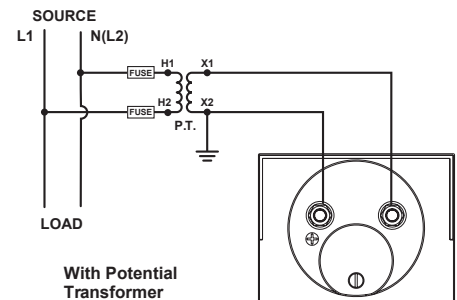
AC Ammeter

PK-260-240-(LALA, LSLS, MTMT)
PK-260-340-(LALA, LSLS, MTMT)



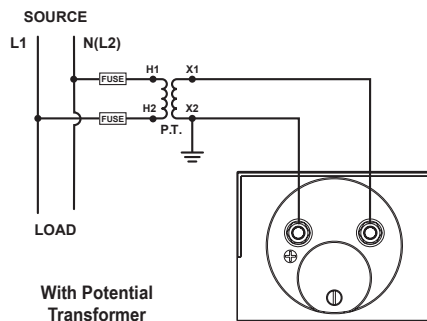
Frequency Meter

PK-264-250-(AJAJ, ANAN)
PK-264-350-(AJAJ, ANAN)



AC Voltmeter

PK-260-244-PZSJ
PK-260-344-(PZRX, PZSJ)



AC Ammeter

PK-260-240-(LSNT, LSPK, LSRL, LSSC, LSSN, LSTE)
PK-260-340-(LSNT, LSPK, LSRL, LSSC, LSSN, LSTE, LSTM)

