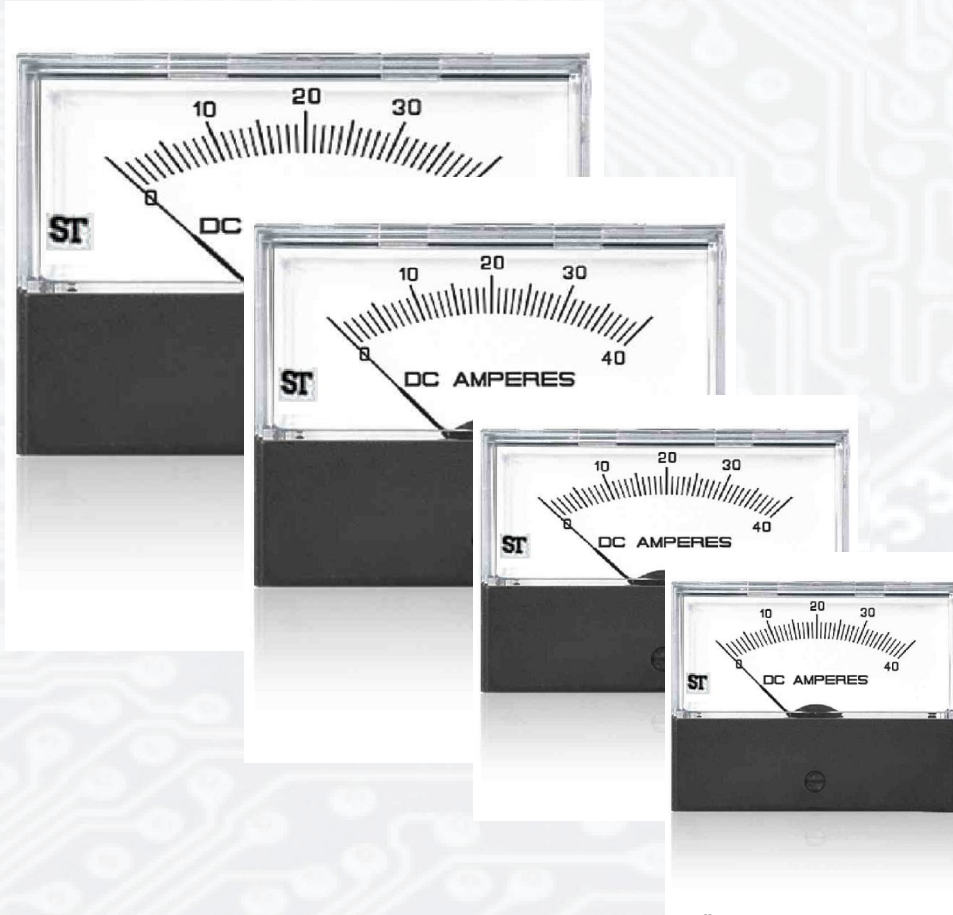




Technical Data Sheet

Contender Series meter



The moving iron & moving coil panel meters, sizes $1\frac{1}{2}$ " , $2\frac{1}{2}$ " , $3\frac{1}{2}$ " , $4\frac{1}{2}$ " are housed in a moulded polycarbonate cases which are suitable for the measurement of AC & DC ammeters, voltmeter & frequency meters utilizing a high torque pivot and jewel movement.

Special Features

- Surface or window mounting.
- Near linear scale.
- Glass filled polycarbonate housing (UL 94 V-0).
- Knife edge pointer.

Application

The contender range of analog panel meters offers accurate measurement and indication of most electrical & electronics parameters in industry standard 1^{1/2}", 2^{1/2}", 3^{1/2}", 4^{1/2}" case sizes. This innovative design features a detachable lower fascia plate which allows the flexibility of either surface or window mounting. The fascia is simply unclipped to achieve the completely flush panel appearance of panel window mounting.

The range offers AC & DC ammeters, voltmeters and frequency meters utilizing a high torque pivot and jewel movement. AC moving coil rectified meters provide 1.5% accuracy of full scale value and features a rear zero adjuster screw for tamper proof installation. AC moving iron meters also provide 1.5% high accuracy and true RMS measurement.

Functional Areas

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

Features

- Measuring and indication of AC amps, volts, frequency and DC signals.
- Surface or window mounting.
- Rear zero adjuster on moving coil meters.
- High torque pivot and jewel movement.
- True RMS measurement meters.
- *AC and DC inputs.
- Up to 40A DC direct connected.
- Up to 50A AC direct connected.

(Not applicable for model 112)*

Benefits

- AC moving iron and moving coil mechanisms.
- ANSI standard case sizes.
- Detachable lower fascia plate.
- Easy to modify for distributions.

Operation

Moving Coil Meter

These meters offers a centre cored, self shielding moving coil movements using pivots, hairspring and spring jewels. Variations in movement are limited by design. All DC voltmeters are 1000 ohms per volt, moving coil rectified products run at 900 ohms per volt. Milivolt meter use the 5 miliamps/50mV resistance.

Moving Iron Meter

This clapper type repulsion design utilizes a pivot, hairspring and jewel movement. The bottom jewel is oil filled to provide damping while the top is spring for resilience. All voltmeters are manufactured with internal voltage dropper resistor.

Frequency Meter

Frequency meters use a 1 mA/350ohm movement driven by an EMC hard frequency conversion circuit.

Dials, Pointers and Scales

Standard dials are matt white black printed scales and a tubular knife- edge black are balanced within 1% of scale length and feature a highly repeatable flattened arc scale shape, ensuring consistently accurate measurement reading. Dials are interchangeable between the contender range of products using the same input within the published specification of the meter. Options for non standard customer specific dials are available upon request.

Technical Specifications

Applicable Standards	
Terminal bolts/leads	DIN 46200/46282
Safety requirements and protective measures for Electrical indicating instruments and their accessories	IEC 529, IEC 61010-1
Performance specifications for direct acting indicating analogue electrical measuring instruments and their accessories	IS 1248 IEC 51 ANSI C39.1 1981
UL Compatibility	UL 94 V-0

Comply with following European directives

2004 / 108 / EC (EMC directive), 2006 / 95/EC (low voltage directive) & amendment 93/68/EEC, For CE Marking.

Scale and Pointer				
Pointer	Tube knife - edge pointer			
Pointer deflection	90°			
Scale characteristics	(A) Near Linear above 10% of nominal full Scale value for moving iron (B) Linear scale for moving coil , frequency, moving coil with rectifier			
Scale division	Coarse - fine			
Scale length	112	212	312	412
	32.56 mm	49.03 mm	57.22mm	90.14 mm

Nominal Range of use

Ambient Temperature	0 ...40 °C
Position of use	Vertical ± 5°
Frequency	FN ± 10%
External Magnetic Field	At 0.4 kA/m

Mechanical Data

Case details	Moulded case suitable for mounting in Control / switchgear panels Machinery consoles.
Case material	Polycarbonate , flame retardant and drip proof as per UL 94 V-0.
Front window	Polycarbonate (Shatter proof & transparent)
Colour of front cover	Black
Position of use	Vertical
Panel fixing	Fixing Stud
Panel thickness	≤ 10 mm

Terminals

Voltmeters and Ammeters & Frequency meters	Terminal 10-32 UNF, Washer 10-32 UNF
Fixing	Surface mounting: 4 corner studs, 4-40 UNC
	Rear of panel mounting: 2 through hole mounts (Except Model 112)

Reference Conditions

Accuracy	According to IEC 51/DIN EN 60051
DC Ammeters & Voltmeters	1.5% 0 to 100% of full scale deflection
AC Ammeters & Voltmeters	Moving iron: 1.5% 10 to 100% of full scale deflection Moving coil: 1.5% 0 to 100% of full scale deflection
Frequency Meters	0.5% of end scale value
Ambient temperature	23 C ± 2°C
Position of use	Nominal position ±1°
Input Waveform	Rated value of measured quantity sine wave, distortion factor ≤ 5%
Frequency	45 - 65Hz
Other Conditions	IEC 51/DIN EN 60051

Electrical Data

DC moving coil Ammeters	50 mA to 40 A
DC moving coil Voltmeters	50 mV to 600 V
AC moving coil Ammeters (VQ)	1 mA to 100 mA
AC moving coil Voltmeters (VQ)	6 V to 600 V
AC moving iron Ammeters (EQ)	100 mA to 50 A
AC moving coil Voltmeters (EQ)	6 V to 600 V
Frequency Meters	45-50-55Hz, 55-60-65Hz, 45-55-65Hz, 360-440Hz
Overload	Continuous 1.2

Environmental Conditions

Climatic Suitability	Climate category II as per IEC 60051 (climatic class 3 according to VDE/VDI 3540)
Operating Temperature	0°C... + 40°C
Storage temperature	- 20°C ...+55°C
Relative humidity	25% to 80% nominal range of use
Shock resistance	15 g. for pulse duration 11ms
Vibration resistance	ANSI C39.1 cl. 5. 13

Options

Case	
Front Window	Shatter Proof Polycarbonate (Transparent)
Color of Front cover	Black
Dial	
Blank dial	With initial and end values marked
Special markings	Numbering/ Lettering
Division dials	Basic divisions without numbering
Color markings/bands	Red or green
Over rang (Moving Iron Ammeter)	Two, three and five times over range

Standard Measuring Ranges

DC moving coil Ammeters	50 mA to 40 A
DC moving coil Voltmeters	50 mV to 600 V
AC moving coil Ammeters (VQ)	1 mA to 100 mA
AC moving coil Voltmeters (VQ)	6 V to 600 V
*AC moving iron Ammeters (EQ)	100 mA to 50 A
*AC moving coil Voltmeters (EQ)	6 V to 600 V
Frequency Meters	45-50-55Hz, 55-60-65Hz, 45-55-65Hz, 360-440Hz

* 112 size not applicable

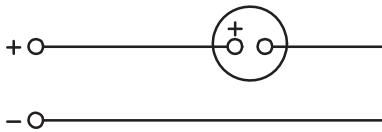
Accessories

Safety Precautions

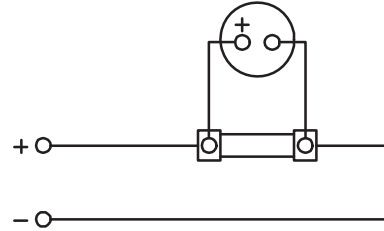
- 1) Instruments with damaged window or glasses must be disconnected from the mains.
- 2) Adequate safety clearance must be maintained to control panel fasteners and to sheet metal housing. If non - insulated connector wires are used.
- 3) Instruments to be used in grounded panel.

Electrical Connections

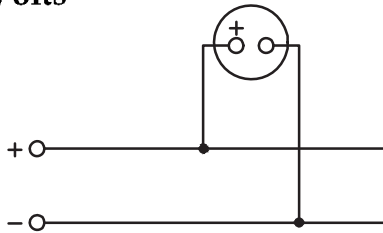
DC Amps - Self Contained



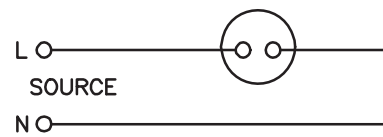
DC Amps - For use with external shunt



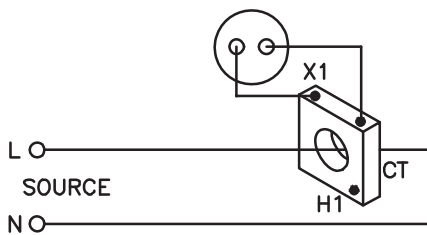
DC Volts



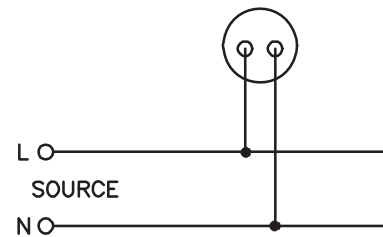
AC Amps - Self Contained



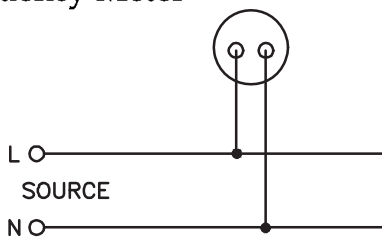
AC Amps - For use with Current Transformer



AC Volts

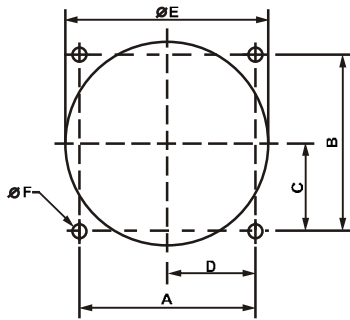


Frequency Meter



Dimensions

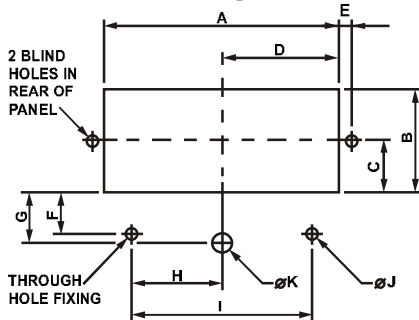
Surface Mount Cut Out



Surface Mount Cut Out

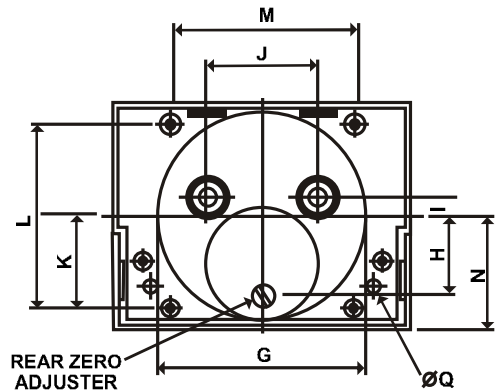
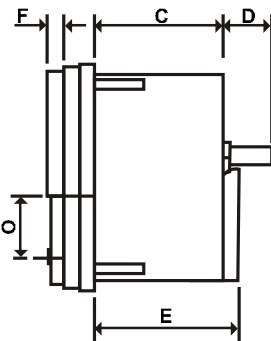
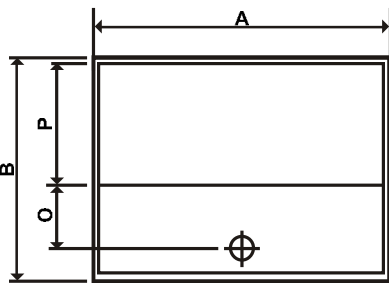
	A	B	C	D	E	F
112 (inch)	1.31	1.31	0.66	0.66	1.56	0.14
112 (mm)	33.27	33.27	16.76	16.76	39.62	3.56
212 (inch)	1.88	1.88	0.94	0.94	2.16	0.14
212 (mm)	47.75	47.75	23.88	23.88	54.86	3.56
312 (inch)	2.25	2.25	0.92	1.12	2.16	0.14
312 (mm)	57.15	57.15	23.37	28.45	54.85	3.56
412 (inch)	4	3.56	1.54	2	2.69	0.14
412 (mm)	101.6	90.42	39.12	50.8	68.33	3.56

Window Mounting Cut Out



Window Mounting Cut Out

	A	B	C	D	E	F	G	H	I	J	K
112 (inch)	2.17	0.94	0.47	1.08	0.16	-	0.47	-	-	-	0.23
112 (mm)	55.12	23.88	11.94	27.43	4.06	-	11.94	-	-	-	5.84
212 (inch)	2.92	1.28	0.63	1.46	0.16	0.64	0.81	1.13	2.26	0.14	0.23
212 (mm)	74.17	32.51	16.0	37.08	4.06	16.26	20.57	28.70	57.40	3.56	5.84
312 (inch)	3.63	1.61	0.8	1.82	0.16	0.67	0.8	1.48	2.96	0.14	0.23
312 (mm)	92.20	40.89	20.32	46.23	4.06	17.20	20.35	37.59	75.18	3.56	5.84
412 (inch)	5.05	2.36	1.18	2.52	0.19	0.85	1.07	2.11	4.22	0.14	0.23
412 (mm)	128.27	59.94	29.97	64.01	4.83	21.59	21.9	53.59	107.19	3.56	5.84



Model

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
112 (inch)	2.26	1.75	1.3	0.5	-	0.13	1.50	0.57	0.15	0.95	0.65	1.30	1.30	0.85	0.53	0.9	0.14
112 (mm)	57.4	44.45	33.0	12.7	-	3.55	38.1	14.48	3.81	24.13	16.60	33.02	33.02	21.60	13.46	22.86	3.56
212 (inch)	3.0	2.30	1.3	0.5	1.46	0.15	2.12	0.81	0.2	1.12	0.94	1.88	1.88	1.16	0.63	1.27	0.156
212 (mm)	76.2	73.9	33.0	12.7	37.08	3.81	53.8	20.57	5.08	28.4	23.88	47.75	47.75	29.46	16	32.26	4
312 (inch)	3.75	2.91	1.3	0.5	1.46	0.16	2.12	0.81	0.2	1.12	0.92	2.25	2.25	1.25	0.81	1.42	0.23
312 (mm)	95.25	73.91	33.0	12.7	37.08	4.06	53.8	20.57	5.08	28.45	23.37	57.15	57.15	31.75	20.57	36.07	5.84
412 (inch)	5.10	4	1.3	0.5	1.46	0.51	2.65	1.02	-	1.12	1.53	3.55	4	2	0.96	2.30	0.23
412 (mm)	129.54	101.6	33.0	12.7	37.08	12.95	67.31	25.91	-	28.45	38.86	90.17	101.6	45.5	21.9	58.42	5.84

For more details and product codes, please contact our local office



sifam tinsley
PRECISION INSTRUMENTATION

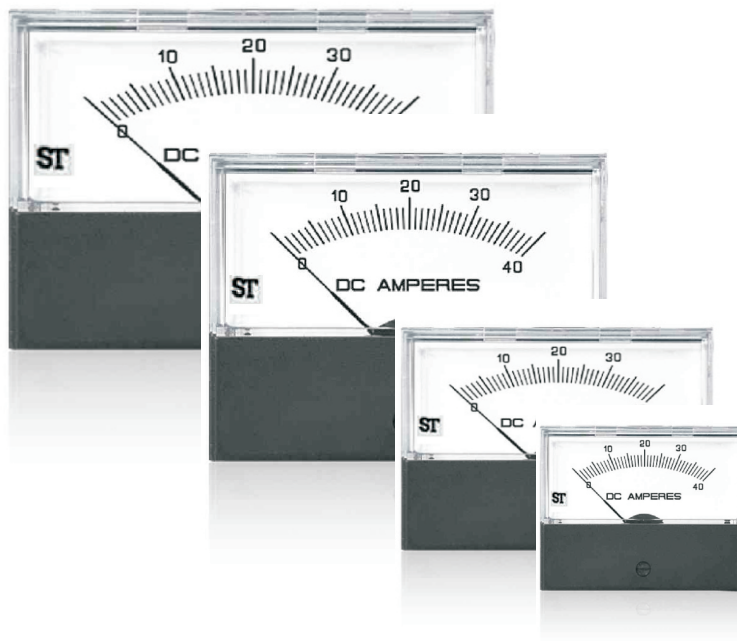
Sifam Tinsley Instrumentation Inc.
3105, Creekside Village Drive,
Suite No. 801, Kennesaw,
Georgia 30144 (USA)
E-mail Id : psk@sifamtinsley.com
Web : www.sifamtinsley.com
Contact No. : +1 404 736 4903

Sifam Tinsley Instrumentation Ltd
Unit 1 Warner Drive,
Springwood Industrial Estate
Braintree, Essex, UK, CM72YW
E-mail: sales@sifamtinsley.com
Web: www.sifamtinsley.com/uk
Contact: +44(0)1803615139



Sifam Tinsley Instrumentation Inc.

Contender Series Coding Table



Sifam Tinsley Instrumentation Inc.

3105, Creekside Village Drive, Suite No. 801,
Kennesaw, GA- 30144 (USA)

Contact : +1.404.7364903

E-mail : psk@sifamtinsley.com

Powered By Technology... Driven By Service...

Moving coil DC meter

Product Code	PQ1C-	X	XX	X	X	X	X	XX	XXXX
Input type for PQ1C	Current Meter	I							
	Voltage Meter	V							
Measuring range for PQ1C	50uA		1						
	100uA		2						
	500uA		6						
	1mA		7						
	100mA		18						
	800mA		25						
	4-20mA		26						
	1A		27						
	5A		30						
	10A		31						
	30A		34						
	50A		36						
	50mV		2B						
	100mV		2E						
	300mV		2G						
	1V		2H						
	20V		2R						
	100V		3A						
	200V		3D						
	300V		3J						
400V		3K							
400V		3K							
500V		3L							
600V		3M							
Zero position for PQ1C	Left Zero			L					
	Right Zero			R					
	Center Zero			C					
	Suppressed Zero			S					
	Shifted zero			H					
Accuracy Class for PQ1C	Class - 1.5				1				
	Class - 1.0				2				
	Class 2.5				4				
Type of Dial for PQ1C	Standard Aluminum					A			
	Aluminum with Colour mark					R			
	Aluminium with colour bands					C			
	Without Dial					X			
	Blank Scale					B			
Background for PQ1C	Black Background						B		
	White background							W	
	NA							X	
Customer Code for PQ1C	Blank							0	
	SIFAM TINSLAY							ST	0000

Moving coil DC meter

Product Code	PQ2C-	X	XX	X	X	X	X	XX	XXXX
Input type for PQ2C	Current Meter	I							
	Voltage Meter	V							
Measuring range for PQ2C	50uA		1						
	100uA		2						
	500uA		6						
	1mA		7						
	100mA		18						
	800mA		25						
	4-20mA		26						
	1A		27						
	5A		30						
	10A		31						
	30A		34						
	50A		36						
	50mV		2B						
	100mV		2E						
	300mV		2G						
	1V		2H						
	20V		2R						
	100V		3A						
	200V		3D						
	300V		3J						
400V		3K							
400V		3K							
500V		3L							
600V		3M							
Zero position for PQ2C	Left Zero			L					
	Right Zero			R					
	Center Zero			C					
	Suppressed Zero			S					
	Shifted zero			H					
Accuracy Class for PQ2C	Class - 1.5				1				
	Class - 1.0				2				
	Class 2.5				4				
Type of Dial for PQ2C	Standard Aluminum					A			
	Aluminum with Colour mark					R			
	Aluminium with colour bands					C			
	Without Dial					X			
	Blank Scale					B			
Background for PQ2C	Black Background						B		
	White background							W	
	NA							X	
Customer Code for PQ2C	Blank							0	
	SIFAM TINSLAY							ST	0000

Moving coil DC meter

Product Code	PQ3C-	X	XX	X	X	X	X	XX	XXXX
Input type for PQ3C	Current Meter	I							
	Voltage Meter	V							
Measuring range for PQ3C	50uA		1						
	100uA		2						
	500uA		6						
	1mA		7						
	100mA		18						
	800mA		25						
	4-20mA		26						
	1A		27						
	5A		30						
	10A		31						
	30A		34						
	50A		36						
	50mV		2B						
	100mV		2E						
	300mV		2G						
	1V		2H						
	20V		2R						
	100V		3A						
	200V		3D						
	300V		3J						
400V		3K							
400V		3K							
500V		3L							
600V		3M							
Zero position for PQ3C	Left Zero			L					
	Right Zero			R					
	Center Zero			C					
	Suppressed Zero			S					
	Shifted zero			H					
Accuracy Class for PQ3C	Class - 1.5				1				
	Class - 1.0				2				
	Class 2.5				4				
Type of Dial for PQ3C	Standard Aluminum					A			
	Aluminum with Colour mark					R			
	Aluminium with colour bands					C			
	Without Dial					X			
	Blank Scale					B			
Background for PQ3C	Black Background						B		
	White background							W	
	NA							X	
Customer Code for PQ3C	Blank							0	
	SIFAM TINSLAY							ST	0000

Moving coil DC meter

Product Code	PQ4C-	X	XX	X	X	X	X	XX	XXXX
Input type for PQ4C	Current Meter	I							
	Voltage Meter	V							
Measuring range for PQ4C	50uA		1						
	100uA		2						
	500uA		6						
	1mA		7						
	100mA		18						
	800mA		25						
	4-20mA		26						
	1A		27						
	5A		30						
	10A		31						
	30A		34						
	50A		36						
	50mV		2B						
	100mV		2E						
	300mV		2G						
	1V		2H						
	20V		2R						
	100V		3A						
	200V		3D						
	300V		3J						
400V		3K							
400V		3K							
500V		3L							
600V		3M							
Zero position for PQ4C	Left Zero			L					
	Right Zero			R					
	Center Zero			C					
	Suppressed Zero			S					
	Shifted zero			H					
Accuracy Class for PQ4C	Class - 1.5				1				
	Class - 1.0				2				
	Class 2.5				4				
Type of Dial for PQ4C	Standard Aluminum					A			
	Aluminum with Colour mark					R			
	Aluminium with colour bands					C			
	Without Dial					X			
	Blank Scale					B			
Background for PQ4C	Black Background						B		
	White background							W	
	NA							X	
Customer Code for PQ4C	Blank							0	
	SIFAM TINSLAY							ST	0000

Moving Iron AC meter

Product Code	EQ2C-	X	XX	X	X	X	X	XX	XXXX
Input Type for EQ2C	Current Meter	I							
	Voltage Meter	V							
Measuring range for EQ2C	100mAmps		01						
	250mAmps		02						
	500mAmps		03						
	1Amps		04						
	2Amps		05						
	5Amps		06						
	10Amps		07						
	15Amps		08						
	20Amps		09						
	25Amps		10						
	30Amps		11						
	31Amps		12						
	40Amps		13						
	50Amps		14						
	10Volts		2M						
	15Volts		2A						
	50Volts		2B						
	60Volts		2C						
	100Volts		2L						
	150Volts		2E						
	250Volts		2F						
	300Volts		2G						
	350Volts		2H						
	500Volts		2J						
	600Volts		2K						
Suppression for EQ2C	X1			1					
	X2			2					
	X3			3					
	X5			5					
	X6			6					
	x4			4					
	NA			X					
Accuracy Class for EQ2C	Class - 1.5				1				
	Class - 1.0				2				
Type of Dial for EQ2C	Standard Aluminum						A		
	Aluminum with Colour mark						R		
	With Dual Scale						D		
	Aluminium with colour bands						C		
	Without Dial						X		
	Blank Scale						B		
Background for EQ2C	Black Background							B	
	White background							W	
	NA							X	
Customer Code EQ2C	Blank								0
	SIFAM TINSLAY								ST 0000

Moving Iron AC meter

Product Code	EQ3C-	X	XX	X	X	X	X	XX	XXXX
Input Type for EQ3C	Current Meter	I							
	Voltage Meter	V							
Measuring range for EQ3C	100mAmps		01						
	250mAmps		02						
	500mAmps		03						
	1Amps		04						
	2Amps		05						
	5Amps		06						
	10Amps		07						
	15Amps		08						
	20Amps		09						
	25Amps		10						
	30Amps		11						
	31Amps		12						
	40Amps		13						
	50Amps		14						
	10Volts		2M						
	15Volts		2A						
	50Volts		2B						
	60Volts		2C						
	100Volts		2L						
	150Volts		2E						
	250Volts		2F						
	300Volts		2G						
	350Volts		2H						
	500Volts		2J						
	600Volts		2K						
Suppression for EQ3C	X1			1					
	X2			2					
	X3			3					
	X5			5					
	X6			6					
	x4			4					
	NA			X					
Accuracy Class for EQ3C	Class - 1.5				1				
	Class - 1.0				2				
Type of Dial for EQ3C	Standard Aluminum						A		
	Aluminum with Colour mark						R		
	With Dual Scale						D		
	Aluminium with colour bands						C		
	Without Dial						X		
	Blank Scale						B		
Background for EQ3C	Black Background							B	
	White background							W	
	NA							X	
Customer Code EQ3C	Blank								0
	SIFAM TINSLAY								ST 0000

Moving Iron AC meter

Product Code	EQ4C-	X	XX	X	X	X	X	XX	XXXX
Input Type for EQ4C	Current Meter	I							
	Voltage Meter	V							
Measuring range for EQ4C	100mAmps		01						
	250mAmps		02						
	500mAmps		03						
	1Amps		04						
	2Amps		05						
	5Amps		06						
	10Amps		07						
	15Amps		08						
	20Amps		09						
	25Amps		10						
	30Amps		11						
	31Amps		12						
	40Amps		13						
	50Amps		14						
	10Volts		2M						
	15Volts		2A						
	50Volts		2B						
	60Volts		2C						
	100Volts		2L						
	150Volts		2E						
	250Volts		2F						
	300Volts		2G						
	350Volts		2H						
	500Volts		2J						
	600Volts		2K						
Suppression for EQ4C	X1			1					
	X2			2					
	X3			3					
	X5			5					
	X6			6					
	x4			4					
	NA			X					
Accuracy Class for EQ4C	Class - 1.5				1				
	Class - 1.0				2				
Type of Dial for EQ4C	Standard Aluminum						A		
	Aluminum with Colour mark						R		
	With Dual Scale						D		
	Aluminium with colour bands						C		
	Without Dial						X		
	Blank Scale						B		
Background for EQ4C	Black Background							B	
	White background							W	
	NA							X	
Customer Code EQ4C	Blank								0
	SIFAM TINSLAY								ST 0000

Frequency Meter								
Product Code	ZQ2C-	X	XX	X	X	X	XXXX	XX
Frequency for ZQ2C	55-60-65Hz	56						
	45-60-65Hz	46						
	45-50-55Hz	45						
	360-400-440Hz	34						
Input Voltage for ZQ2C	110-130V		01					
	110V		02					
	200V		03					
	250V		04					
	100-130V		05					
	120V		06					
	100-125V		07					
	200-250V		08					
Accuracy for ZQ2C	Class - 1.0			2				
	Class - 0.5			3				
Type of Dial for ZQ2C	Standard Aluminium				A			
	Aluminium with Colour mark				R			
	Aluminium with colour bands				C			
Background for ZQ2C	Black Background					B		
	White background					W		
NA							0000	
Customer Code for ZQ2C	Blank							0
	SIFAM TINSLAY							ST

Frequency Meter								
Product Code	ZQ3C-	X	XX	X	X	X	XXXX	XX
Frequency for ZQ3C	55-60-65Hz	56						
	45-60-65Hz	46						
	45-50-55Hz	45						
	360-400-440Hz	34						
Input Voltage for ZQ3C	110-130V		01					
	110V		02					
	200V		03					
	250V		04					
	100-130V		05					
	120V		06					
	100-125V		07					
	200-250V		08					
Accuracy for ZQ3C	Class - 1.0			2				
	Class - 0.5			3				
Type of Dial for ZQ3C	Standard Aluminium				A			
	Aluminium with Colour mark				R			
	Aluminium with colour bands				C			
Background for ZQ3C	Black Background					B		
	White background					W		
NA							0000	
Customer Code for ZQ3C	Blank							0
	SIFAM TINSLAY							ST

Frequency Meter								
Product Code	ZQ4C-	XX	XX	X	X	X	XXXX	XX
Frequency for ZQ4C	55-60-65Hz	56						
	45-60-65Hz	46						
	45-50-55Hz	45						
	360-400-440Hz	34						
Input Voltage for ZQ4C	110-130V		01					
	110V		02					
	200V		03					
	250V		04					
	100-130V		05					
	120V		06					
	100-125V		07					
	200-250V		08					
Accuracy for ZQ4C	Class - 1.0			2				
	Class - 0.5			3				
Type of Dial for ZQ4C	Standard Aluminium				A			
	Aluminium with Colour mark				R			
	Aluminium with colour bands				C			
Background for ZQ4C	Black Background					B		
	White background					W		
NA							0000	
Customer Code for ZQ4C	Blank							0
	SIFAM TINSLAY							ST

Rectified Moving coil AC Meter

Product Code	VQ1C-	X	XX	X	X	X	X	XX	XXXX
Input type for VQ1C	Current Meter	I							
	Voltage Meter	V							
Measuring range for VQ1C									
	100uA	02							
	500uA	06							
	1mA	07							
	100mA	18							
	800mA	25							
	4-20mA	26							
	50V	2W							
	100V	3A							
	200V	3D							
	300V	3J							
	400V	3K							
	400V	3K							
	500V	3L							
	600V	3M							
	(For voltmeter :30-50V possible in 2.5%) (For ammeter : All uA ranges possible in 2.5%)								
Zero position for VQ1C	Left Zero			L					
Accuracy Class for VQ1C	Class - 1.5				1				
	Class - 1.0				2				
	Class 2.5				4				
Type of Dial for VQ1C	Standard Aluminum					A			
	Aluminum with Colour mark					R			
	Aluminium with colour bands					C			
	Without Dial					X			
	Blank Scale					B			
Background for VQ1C	Black Background						B		
	White background						W		
	NA						X		
Customer Code for VQ1C	SIFAM TINSLAY							ST	0000

Rectified Moving coil AC Meter

Product Code	VQ2C-	X	XX	X	X	X	X	XX	XXXX
Input type for VQ2C	Current Meter	I							
	Voltage Meter	V							
Measuring range for VQ2C									
	100uA	02							
	500uA	06							
	1mA	07							
	100mA	18							
	800mA	25							
	4-20mA	26							
	50V	2W							
	100V	3A							
	200V	3D							
	300V	3J							
	400V	3K							
	400V	3K							
	500V	3L							
	600V	3M							
	(For voltmeter :30-50V possible in 2.5%) (For ammeter : All uA ranges possible in 2.5%)								
Zero position for VQ2C	Left Zero			L					
Accuracy Class for VQ2C	Class - 1.5				1				
	Class - 1.0				2				
	Class 2.5				4				
Type of Dial for VQ2C	Standard Aluminum					A			
	Aluminum with Colour mark					R			
	Aluminium with colour bands					C			
	Without Dial					X			
	Blank Scale					B			
Background for VQ2C	Black Background						B		
	White background						W		
	NA						X		
Customer Code for VQ2C	SIFAM TINSLAY							ST	0000

Rectified Moving coil AC Meter

Product Code	VQ3C-	X	XX	X	X	X	X	XX	XXXX
Input type for VQ3C	Current Meter	I							
	Voltage Meter	V							
Measuring range for VQ3C									
	100uA		02						
	500uA		06						
	1mA		07						
	100mA		18						
	800mA		25						
	4-20mA		26						
	50V		2W						
	100V		3A						
	200V		3D						
	300V		3J						
	400V		3K						
	400V		3K						
	500V		3L						
	600V		3M						
	(For voltmeter :30-50V possible in 2.5%) (For ammeter : All uA ranges possible in 2.5%)								
Zero position for VQ3C	Left Zero			L					
Accuracy Class for VQ3C	Class - 1.5					1			
	Class - 1.0					2			
	Class 2.5					4			
Type of Dial for VQ3C	Standard Aluminum						A		
	Aluminum with Colour mark						R		
	Aluminium with colour bands						C		
	Without Dial						X		
	Blank Scale						B		
Background for VQ3C	Black Background							B	
	White background							W	
	NA							X	
Customer Code for VQ3C	SIFAM TINSLAY								ST 0000

Rectified Moving coil AC Meter

Product Code	VQ4C-	X	XX	X	X	X	X	XX	XXXX
Input type for VQ4C	Current Meter	I							
	Voltage Meter	V							
Measuring range for VQ4C									
	100uA	02							
	500uA	06							
	1mA	07							
	100mA	18							
	800mA	25							
	4-20mA	26							
	50V	2W							
	100V	3A							
	200V	3D							
	300V	3J							
	400V	3K							
	400V	3K							
	500V	3L							
	600V	3M							
	(For voltmeter :30-50V possible in 2.5%) (For ammeter : All uA ranges possible in 2.5%)								
Zero position for VQ4C	Left Zero			L					
Accuracy Class for VQ4C	Class - 1.5				1				
	Class - 1.0				2				
	Class 2.5				4				
Type of Dial for VQ4C	Standard Aluminum					A			
	Aluminum with Colour mark					R			
	Aluminium with colour bands					C			
	Without Dial					X			
	Blank Scale					B			
Background for VQ4C	Black Background						B		
	White background						W		
	NA						X		
Customer Code for VQ4C	SIFAM TINSLAY							ST	0000