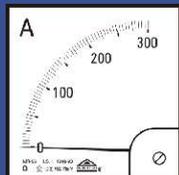
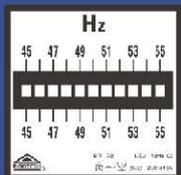




EDITION : 11/01/2020

PRODUCT CATALOG CUM PRICELIST

Taxes Extra As Applicable



WE MONITOR & SAFEGUARD ELECTRICITY

Company Profile

Electricity is the most vital source of energy in modern era. We make use of this energy in Distribution Panels, Machines, Gadgets & Equipments etc. Measuring Instruments indicate/record various electrical parameters and thus forms a dialogue between man & machine.

Now a days, the sources of electricity generation has increased manifold, viz, Atomic, Solar, Wind, Hydro alongwith the conventional Coal & Oil based Generating Sets.

“INDOTECH” was established in a small rental shed in Delhi in the year 1974 with an objective in mind to manufacture Indicating Test and Measuring Instruments by Er. L.R. Madan, an Alumnus of BITS, Pilani in Electrical Engineering with specialisation in Instrumentation & Training in Industrial Management. He also undertook special training of Instrument Calibration from IDEMI, Mumbai.

In a short span of time, good response from the Market encouraged us to expand our manufacturing activities. Today “INDOTECH” possesses an integrated manufacturing setup with excellent production and quality control facilities in its own spacious building located at NOIDA. A highly competent team works ceaselessly to craft the superb products at competitive prices.

We are now launching Miniature Circuit Breakers, Distribution Boards and also updated Digital Panel Mounted and Wall Mounted Type Energy Meters. These instruments incorporate Micro Controller based technology.

Marketing, Technical Support & Services are provided by the experienced team members comprising of Sales, Marketing and Business Associates based almost at all the major cities of India.

In addition to an excellent marketing & support chain in India, “INDOTECH” is strengthening its global reach by exploring overseas markets also. We work on the principle that “IMPROVEMENT AND UPGRADATION HAS NO END”, so we are always on the look out for the techniques to improve the quality and services of our products.

In our 45 years of working, we have always aimed to provide best quality, in time delivery entire to the satisfaction of customer needs and requirements.

At “INDOTECH” we always welcome suggestions and feedback regarding changes whether on working environment or technologies.

Quality Policy

“INDOTECH” resolves to make best efforts to keep pace with the developing technology in order to meet customers's expectation by providing best quality products at cost effective prices.

PRODUCT INDEX GROUP "A"

S.NO	PRODUCT NAME	PAGE NO.	S.NO	PRODUCT NAME	PAGE NO.
1.	Ammeters, Analog Type	5	17.	Milli Ammeters, Analog Type	5
2.	Ammeters, Digital Type	1	18.	Milli Ammeters, Digital Type	1
3.	AVF Meters, Digital Type	3	19.	Milli Voltmeters, Analog Type	5
4.	Clamp Meters, Digital Type	16	20.	Milli Voltmeters, Digital Type	1
5.	Current Transformers Tape Wound (Core Balanced Type)	11	21.	Multifunction Meters, LED Type	1
6.	Current Transformers Tape Wound (BPL Bar Primary) Type	11	22.	Multi Meters , Digital Type	16
7.	Current Transformers Tape Wound WPL (Wound Primary) Type	11	23.	MW Meters , Digital Type	1
8.	Current Transformers Tape Wound Protection Type	11	24.	Phase Sequence Indicators	9
9.	Current Transformers Resin Cast Type	11	25.	Power Factor Controller	4
10.	Earth Testers	15	26.	Power Factor Meters , Digital Type	1
11.	Frequency Meters, Analog Type	9	27.	Railway Products	16
12.	Frequency Meters, Digital Type	1	28.	Shunts	10
13.	Frequency Meters, Reed Type	9	29.	Three Phase Ammeters , Digital Type	3
14.	Insulation Testers	15	30.	Three Phase Voltmeters , Digital Type	3
15.	kVA Meters, Digital Type	1	31.	Variacs (Continuously Variable Voltage Auto Transformers)	14
16.	kW Meters , Digital Type	1	32.	Voltmeters , Analog Type	5
			33.	Voltmeters , Digital Type	1
			34.	Wattmeters , Digital Type	1

PRODUCT INDEX GROUP "B"

S.NO	PRODUCT NAME	PAGE NO.	S.NO	PRODUCT NAME	PAGE NO.
1.	Change Over Switches	19	8.	kVAh Meters ,LED Type , Dual Source Mains or Generator , Panel Type	17
2.	Energy Meters , Single Phase, Counter Type	17	9.	kWh Meters , LED Type , Single Source Mains or Generator , Panel Type	17
3.	Energy Meters , Three Phase, Counter Type	17	10.	kWh Meters , LED Type , Dual Source Mains or Generator , Panel Type	17
4.	Energy Meters , Single Phase, LCD Type	17	11.	kWh/kVAh Meters , LED Type , Single Source Mains or Generator , Panel Type	17
5.	Energy Meters , Three Phase, LCD Type	17	12.	kWh/kVAh Meters , LED Type ,Dual Source Mains or Generator ,Panel Type	17
6.	Isolators	19	13.	Miniature Circuit Breakers (MCB's)	18
7.	kVAh Meters , LED Type ,Single Source Mains or Generator , Panel Type	17	14.	MCB Enclosures	20

Note :-

1. In view of continuous developments going on, prices are subject to change without prior notice.
2. This Price List cancels all our previous price lists

"INDOTECH" DIGITAL PANEL METER

'INDOTECH' Digital Panel Meters have been developed to give instantaneous readings of various electrical parameters like mV, V,mA, A, Hz,W,VA,VAR, kWh & PF etc. DISPLAY : 12.5 mm. seven segment Red LED. AUX SUPPLY : 110V or 230V AC. ACCURACY : 1% ± 2 DIGITS

"INDOTECH" DIGITAL VOLTMETERS & AMMETERS

SIZES AVAILABLE : Available in sizes 48x96, 72x72, 96x96, 144x144 mm.

<p>DIGITAL VOLTMETERS AC : Available in following ranges :</p> <p>2V, AC 20V, AC 200V, AC 500V, AC 750V, AC</p> 	<p>DIGITAL VOLTMETERS DC : Available in following ranges :</p> <p>200mV, DC 2V, DC 20V, DC 200V, DC 500V, DC 1000V, DC</p> 	<p>DIGITAL AMMETERS AC : Available in following ranges :</p> <p>200mA, AC 2 A, AC 20 A, AC</p> 	<p>DIGITAL AMMETERS DC : Available in following ranges :</p> <p>200uA, DC 2mA, DC 20mA, DC 200mA, DC 2 A, DC 20 A, DC</p> 
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MICROPROCESSOR BASED PROGRAMMABLE AMMETERS & VOLTMETERS

We have introduced a new series of AC Ammeters which have programmable CT Ratio from 5/5 to 8000/5 in case of CTR 5 & 5/1 to 8000/1 in case of CTR 1 AC Meters . The same features for selection has been provided in DC Ammeters for selection of Shunt Display in case of 75mV ,60mV & 50mV DC Ammeters .

"INDOTECH" DIGITAL FREQUENCY METERS



SIZES AVAILABLE :
Available in sizes 48x96, 72x72, 96x96, 144x144 mm.
Available in following ranges :
30 to 70 Hz, Line (Mains)
10 to 100 Hz, 10 to 1000 Hz

"INDOTECH" DIGITAL RPM METERS



SIZES AVAILABLE :
Available in sizes 48x96, 72x72, 96x96, 144x144 mm.
Available in following ranges :
FSD 2mA DC , 10 mA DC ,
10V DC , 50 Hz DC in terms of rpm
or any FSD as specified

"INDOTECH" DIGITAL WATT, kW, KVA MVA & POWER FACTOR METERS

"INDOTECH" DIGITAL WATT , VA , & VAR METERS



SIZES AVAILABLE :
48X96 , 72X72 , 96X96 , 144X144 mm
Available for 5A Current & 440V for
1 & 3 Phase supply & load ,CTR
Selectable .

"INDOTECH" POWER FACTOR METERS

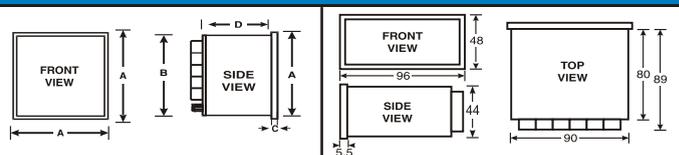


SIZES AVAILABLE :
48X96 , 72X72 , 96X96 , 144X144 mm
Available for 1A or 5A Current & 110,250 or 440V for
single phase & three phase supply & load . The range
is 0.3 Lag - 1 - 0.3 Lead

DIMENSIONS & MOUNTING ARRANGEMENTS

DR72, DR96 & DR144

VOLT, AMPERE & FREQUENCY METERS				
MODEL	A	B	C	D
DR 72	72	66	5.5	84
DR 96	96	90	5.5	45
DR-144	144	136	7	76



Note : Voltmeters and Ammeters are available in 5V, 12V, 24V, 48V & 72 V DC Aux also.

PRICE LIST

1st ALPHABET D	: DIGITAL TYPE OF METER	M - Milli ampere meter	V - Volt meter	X - 50mV
2rd & 3th DIGIT	: 72, 96, 44 (FOR 144X144), 48 (FOR 48X96) SIZE OF THE METER	A - Ampere meter	J - Milli volt meter	Y - 60mV
4 th ALPHABET	: A - AC,D - DC ,R - RPM ,F - FREQUENCY,W - WATT METER , P - POWER FACTOR ,L - KVAR / MVAR , N - KVA / MVA	B - CTR 1A	H - Hertz	Z - 75mV
5th TO 8th DIGIT	: RANGE OF THE METER	C - CTR 5A		
9th ALPHABET	: UNIT OF THE METER	S - SHUNT DROP SELECTABLE		

"INDOTECH" CTR TYPE AMMETERS : AC

Range	SQUARE SERIES						RECTANGULAR SERIES	
	72mm Square		96mm Square		144mm Square		48 X 96mm Rectangular	
	PRODUCT CODE	Price	PRODUCT CODE	Price	PRODUCT CODE	Price	PRODUCT CODE	Price
CTR 5A	DR 72A PROG C	Rs .675	DR 96A PROG C	Rs. 560	DR 44A **** C	Rs. 1145	DR 48A PROG C	Rs. 675
CTR 1A	DR 72A PROG C	Rs .775	DR 96A PROG C	Rs. 675	DR 44A **** C	Rs. 1245	DR 48A PROG C	Rs. 775

NOTE : 1. "PROG" Type CTR METERS ARE MICROPROCESSOR BASED & CT RATIO IS PROGRAMMABLE FROM 5/5A TO 8000/5A IN VARIOUS STEPS IN CASE OF CTR 5A & 5/1A TO 8000/1A IN CASE OF CTR 1 A METERS

2. "XXXX" INDICATE THAT THE CUSTOMER IS TO SPECIFY CT RATIO OR DISPLAY

"INDOTECH" DIGITAL VOLT METERS : AC

500V	D72A 0500V	Rs. 675	D96A 0500V	Rs. 560	D44A 0500V	Rs. 1145	D48A 0500V	Rs. 675
1000V	D72A 1000V	Rs. 935	D96A 1000V	Rs. 885	D44A 1000V	Rs. 1405	D48A 1000V	Rs. 935

"INDOTECH" DIGITAL AMMETERS EXTERNAL SHUNT TYPE

50/60/75 mV EXT SHUNT	D72D PROGS	Rs .875	D96D PROGS	Rs. 775	D44D **** X	Rs. 1395	D48D PROGS	Rs. 875
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"INDOTECH" DIGITAL VOLT METERS : DC

100V	D72D 0100V	Rs 985	D96D 0100V	Rs 825	D44D 0100V	Rs 1245	D48D 0100V	Rs 925
500V	D72D 0500V	Rs.825	D96D 0500V	Rs.725	D44D 0500V	Rs 1175	D48D 0500V	Rs.825
1000V	D72D 1000V	Rs 985	D96D 1000V	Rs 935	D44D 1000V	Rs 1405	D48D 1000V	Rs 985

"INDOTECH" DIGITAL FREQUENCY METERS

30-70Hz	D72F070Hz	Rs .775	D96F070Hz	Rs .675	D44F070Hz	Rs.1625	D48F070Hz	Rs .775
0-100Hz	D72F100Hz	Rs.1175	D96F100Hz	Rs.1075	—————	—————	D48F100Hz	Rs.1175

"INDOTECH" DIGITAL MILLI AMMETERS FOR TRANSDUCERS INPUT

4-20mA	D72D 0420m	Rs. 1225	D96D 0420m	Rs 1125	D44D 0420m	Rs. 1925	D48D 0420m	Rs. 1225
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"INDOTECH" DIGITAL R P M METERS

FSD 2mA DC	D72R **** A	Rs 1060	D96R **** A	Rs 960	D44R **** A	Rs 1475	D48R **** A	Rs 1060
FSD 10V DC	D72R **** V	Rs .960	D96R **** V	Rs .860	D44R **** V	Rs 1375	D48R **** V	Rs . 960

"INDOTECH" DIGITAL WATT/KILOWATT/MEGAWATT METERS

SINGLE PHASE 5A/500V	D72W PROG 1	Rs. 1650	D96W PROG 1	Rs. 1550	D44 **** 1	Rs. 3550	D48W PROG 1	Rs. 1650
THREE PHASE 5A/500V	—————	—————	D96W PROG 3	Rs. 2750	D44 **** 3	Rs. 4150	—————	—————

"INDOTECH" DIGITAL POWER FACTOR METERS

SINGLE PHASE 5A/500V	D72P PROG 1	Rs. 1650	D96P PROG 1	Rs. 1550	D44 **** 1	Rs. 3550	D48P PROG 1	Rs. 1650
THREE PHASE 5A/500V	—————	—————	D96P PROG 3	Rs. 2750	D44 **** 3	Rs. 4150	—————	—————

"INDOTECH" DIGITAL KVA,MVA METERS

SINGLE PHASE 5A/500V	D72N PROG 1	Rs. 1750	D96N PROG 1	Rs. 1650	D44 **** 1	Rs. 3550	D48N PROG 1	Rs. 1750
THREE PHASE 5A/500V	—————	—————	D96N PROG 3	Rs. 2950	D44 **** 3	Rs. 4450	—————	—————

"INDOTECH" DIGITAL KVAR,MVAR METERS

SINGLE PHASE 5A/500V	D72L PROG 1	Rs. 1750	D96L PROG 1	Rs. 1650	D44 **** 1	Rs. 3550	D48L PROG 1	Rs. 1750
THREE PHASE 5A/500V	—————	—————	D96L PROG 3	Rs. 2950	D44 **** 3	Rs. 4450	—————	—————

Standard Packing	36 Units	36 Units	12 Units	36 Units
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NOTE :- 1. PLEASE MENTION CT RATIO IN PLACE OF " **** "

2. PLEASE MENTION THE RPM RANGE IN PLACE OF " **** "

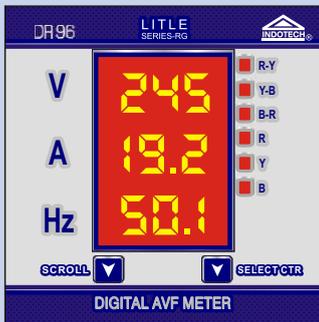
3. IF ANY OTHER PARAMETER IS TO BE MENTIONED ON THE DIAL , ADD RS. 200/- EXTRA ON THE LIST PRICE.

4. SHUNT DROP IS SELECTABLE FOR 50/60/75 mV

"INDOTECH" DIGITAL SINGLE & THREE PHASE AVF METERS

"Indotech" Digital AVF Meters have been designed to measure Current, Voltage & Frequency of the AC Systems . AVF Meters are available in various models for single phase & three phase systems :

In GN series RPM & Hours of run is displayed .



Model Product Code	SINGLE PHASE AVF		THREE PHASE AVF	
	MINIE-RG DR96UMINRG	MINIE-GN DR96UMINGN	LITLIE-RG DR96ULTLRG	LITLIE-GN DR96ULTLGN
VOLTAGE : PHASE to NETURAL	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
VOLTAGE : PAHSE to PHASE	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CURRENT : SINGLE PHASE	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CURRENT : EACH PHASE	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hz : FREQUENCY	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
RPM : RPM DISPLAYED	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
HOUR OF RUN : HOUR of RUN RECORDED	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
DISPLAY	LED Display	LED Display	LED Display	LED Display
Price in Rs.	1120/-	1220/-	1220/-	1350/-

STANDARD PACKING AVF METERS : 36 PCS.

"INDOTECH" DIGITAL THREE PHASE AMMETERS & VOLTMETERS

"INDOTECH" THREE PHASE AMMETERS :

"Indotech" 3Phase Ammeters have been designed for monitoring the current of all the three phases.

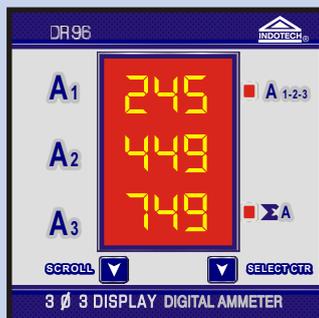
The meter consists of 3 rows of LED display. Each row indicates current per phase. So the current of all the three phases is displayed simultaneously on the panel. "SELECT - CTR " switch is provided under the dial for selecting the CT Ratio. "ΣA" switch is provided for the display of total current of all the three phases.

"INDOTECH" THREE PHASE VOLT METERS :

"Indotech" 3Phase Voltmeters have been designed for monitoring the voltage of all the three phases.

The meter consists of 3 rows of LED display. Each row indicates phase to phase or phase to neutral voltage. So the voltage of all the three phases is displayed simultaneously on the panel.

V Avg switch is provided for the display of average voltage of all the three phases



PRICE LIST		
PRODUCT CODE	DESCRIPTION	
D963DTPAM	Three display Type Three Phase Ammeters	Rs. 1220/-
D963DTPVM	Three display Type Three Phase Voltmeters	Rs. 1220/-
Standard Packing		36 Pcs.

DIMENSIONS & MOUNTING ARRANGEMENTS

THREE PHASE AMP,VOLT, & AVF METERS				
MODEL	A	B	C	D
DR 96	96	90	5.5	45

"INDOTECH" DIGITAL MULTIFUNCTION METERS

"INDOTECH" Digital Multi Function Meters have been designed to measure all the electrical parameters such as Current, Voltage, Frequency, Active Power, Reactive Power, Apparent Power, Power Factor, Active Energy, Reactive Energy, Apparent Energy etc.

Besides the above parameters, we have designed new models of Multi Function Meters for the AC Generators which can also measure RPM of the Alternator and "Hours of Run" of the Generators.

MODELS AVAILABLE:



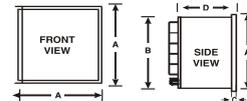
"INDOTECH" DIGITAL MULTIFUNCTION METERS (Three Phase)

Models Product Code	HYTEK-RG D 96M HTK RG	HYTEK-GN D 96M HTK GN	HYTEK-DS D 96M HTK DS
Source	MAINS	GENERATOR	DUAL SOURCE
Parameters			
VOLTAGE : Phase to Phase, Phase to Neutral	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
CURRENT: Line Current Individual Phase & 3 Phase	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
KW : Individual Phase & Total Active Power	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
KVA : Individual Phase & Total Apparent Power	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
KVA _r : Individual Phase & Total Reactive Power	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
PF : Individual Phase & 3 Phase Power Factor	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
KWh : Individual Phase & Total Active Energy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
KVAh : Individual Phase & Total Apparent Energy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
KVA _r h : Individual Phase & Total Reactive Energy	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Hz : Frequency Measurement	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
RPM : RPM Displayed	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
HOURS OF RUN : Hours of Run Displayed	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Display	LED Display	LED Display	LED Display
Price in Rs.	3350/-	3550/-	4850/-

STANDARD PACKING : MULTIFUNCTION METERS : 12 PCS.

**DIMENSIONS & MOUNTING ARRANGEMENTS
MULTIFUNCTION METERS**

MULTIFUNCTION METERS				
MODEL	A	B	C	D
DR 96	96	90	5.5	72



" INDOTECH " AUTOMATIC POWER FACTOR CONTROLLERS

"Indotech" has designed APFC's for the measurement & control of Power Factor of the system by using Reactive Power Compensation . Automatic Switch ON & Switch OFF of the Capacitors provides necessary compensation to the nearest level of the target PF .

Sizes Available : 96 x 96 mm & 144 x 144 mm

Various models Available from 4 Relays to 16 Relays

Model Available :

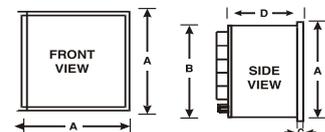
STANDARD MODEL : It is a base model which displays PF & provides compensation .

SMART MODEL : It is an intelligent model provides all the parameters of Multifunction Meters with provision for sensing of PF & automatically providing compensation .



**DIMENSIONS & MOUNTING ARRANGEMENTS
AUTOMATIC POWER FACTOR CONTROLLERS**

APFC METERS				
MODEL	A	B	C	D
DR-96	90	96	5.5	72
DR-144	144	136	7	76



"INDOTECH" ANALOG PANEL METERS

"INDOTECH" VOLTMETERS & AMMETERS :

GENERAL :

"INDOTECH" Voltmeters and Ammeters have been found indispensable by Laboratories and Industrial Houses. All the components used in the manufacture of the instruments are selective and are designed to ensure long term accuracy and service. All parts/sub-assemblies are thoroughly inspected and gauged at all stages with utmost care by experts.

CONSTRUCTION :

The movements are strongly constructed incorporating synthetic sapphire jewel bearings, hard chrome plated highly polished pivots and phosphor-bronze cadmium copper hair springs. Moving coil meters are fitted with high flux density magnets resulting in linear scale. All these meters have zero adjuster accessible from the front.

TYPE OF METERS :

MOVING IRON TYPE METERS :

These are meant for measuring AC quantities. However, DC quantities could also be measured but with slightly low accuracy. These are available in 90° scale .

MOVING COIL TYPE METERS :

Moving Coil instruments are meant for the measurement of DC voltages and currents. All the meters are fitted with high flux density magnets resulting in linear scale . These are available in 90° & 240° scale .

MOVING COIL RECTIFIER TYPE METERS :

Rectifier type instruments are meant for the measurement of AC voltage and currents. These are moving coil instruments fitted with full wave rectifiers to measure AC quantities. These are available in 90° & 240° scale.

TESTS :

Following tests are performed as per BIS 1248-03

1. VIBRATION TEST :

The meters are subjected to vibrations. This test ensures that if there is any loose component, it will be detected before the meter is passed.

2. LIFE TEST :

The meter is subjected from zero to full scale and the counter meter records the number of operations.

3. OVERLOAD TEST :

The meter is overloaded 120% of its rated capacity for 2 hours.

4. HIGH VOLTAGE BREAKDOWN TEST :

The meter should withstand 2kV, AC, if applied between electrical circuit and any metallic point of the meter for 1 minute.

5. INSULATION RESISTANCE TEST :

BIS1248-03 specifies that the insulation resistance should be above 5 megohms. The test is performed accordingly.

6. ACCURACY TEST :

The accuracy test is performed as per BIS 1248-03.

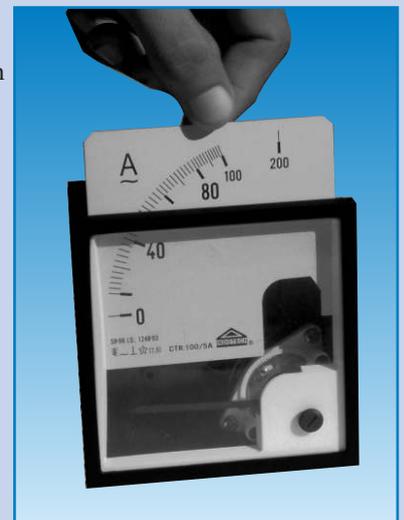
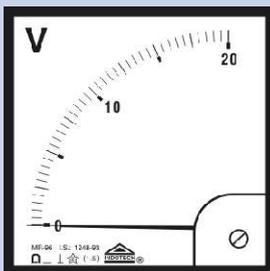
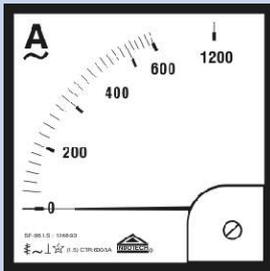
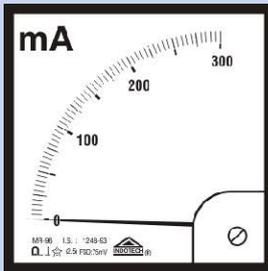
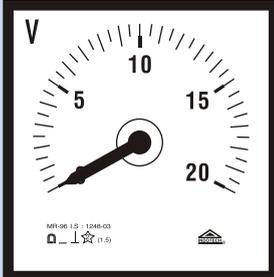
The error is calculated on the basis of full scale deflection of the meter.

PARAMETERS AVAILABLE :

Meters are available for the measurement of mV, V, mA & A, KV meters are calibrated in terms of PT ratio & high range ammeters in terms of CT ratio.

NOTE :

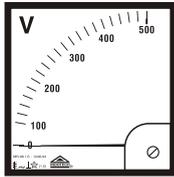
Models SR72/MR72, SR96/MR96 & SR144/MR144 have changeable dial for different CT Ratios in case of Moving Iron Meters and different FSD for Shunt operated meters



"INDOTECH" ANALOG PANEL METERS

MODELS AVAILABLE :

SQUARE FLUSH MOUNTING SERIES



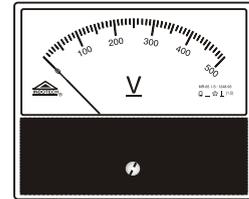
- **TYPE SR72/MR72/CR72/TR72/QR72**
72x72mm square shaped, flush mounting type in narrow framed,elegant looking flame retardant polycarbonate black case.
- **TYPE SR96/MR96/CR96/TR96/QR96**
96x96 mm square shaped, flush mounting type in narrow framed,elegant looking flame retardant polycarbonate black case.
- **TYPE SR144/MR144/CR144/TR144/QR144**
144x144mm square shaped, flush mounting type housed in narrow framed, elegant looking off-white plastic case & phenolic moulded black base.

ROUND FLUSH ,PROJECTION & PEDASTAL SERIES



- **TYPE SO-65 / MO-65 mm round flush mounting type phenolic moulded black case & base .**
- **MODEL 110 : 110 mm dia round flush mounting type in phenolic moulded black case & base .**
- **TYPE P-100 : 100 mm round projection type in plastic moulded black case & phenolic moulded base .**
- **TYPE L-100 : 100 mm round pedastal type in metal black case & phenolic moulded base with plastic stand .**

ACRYLIC SERIES



- **TYPE SR-65 / MR-65 : 65 x 65 mm acrylic case with plastic base panel cutout .**
 - **TYPE SR-80 / MR-80 : 80 x 80 mm acrylic case with plastic base & panel cutout .**
 - **TYPE SR-100 / MR-100 : 100 x 80 mm acrylic case with plastic base & panel cutout .**
- NOTE : For Price refer "INDOTECH" Group 'B' List**

TECHNICAL SPECIFICATIONS

MODEL SELECTION CHART OF VOLTMETERS & AMMETERS				SCALE LENGTH OF VOLTMETERS & AMMETERS					
Ist Alphabet	Type of Meter	2nd Alphabet	Shape of Meter	MODEL Square Series	SCALE LENGTH (APPROX.)	MODEL Round Series	SCALE LENGTH (APPROX.)	MODEL ACRYLIC SERIES	SCALE LENGTH (APPROX.)
S	Moving Iron type of AC meters 90° Scale	O	Round	SR72/MR72/CR72/TR72/QR72	63 mm	SO-65/MO-65	47 mm	SR65 / MR65	52 mm
M	Moving Coil type of DC meters 90° Scale		Flush case	SR96/MR96/CR96/TR96/QR96	95 mm	MODEL-110	95 mm	SR80 / MR80	70 mm
C	Moving Coil Rectifier type AC meters 90° Scale	R	Square	SR144/MR144/CR144/TR144/QR144	138 mm	P-100/L-100	75 mm	SR100 / MR100	82 mm
T	Moving Coil type DC meters 240° Scale		Round Flush						
Q	Moving Coil Rectifier type AC Meters 240° Scale	110							
P	100 mm Projection in Moving Iron	100	Round Projection						
L	100 mm Pedastal in Moving Iron	100	Round Pedastal						

Example : 1. MR96 denotes Moving Coil Square Flush type Meter of size 96x96 mm.
2. SO65 denotes Moving Iron Round Flush type Meter.
3. Model-110 is round meter available in moving coil only.
4. **P-100 is round projection available in Moving Iron only**
5. **L-100 is round pedastal available in Moving Iron only**

NOTE : FOR ACRYLIC SERIES , REFER IDPL "PRICE LIST"

CLASS OF ACCURACY OF VOLTMETERS & AMMETERS

MOVING IRON METERS				MOVING COIL METERS				
MODEL	VOLTMETERS 15V-600V AC	AMMETERS 1A-100A AC	MILLI AMMETERS 200mA-1000mA AC	MODEL	MILLI VOLTMETERS 50mV-750mV DC	VOLTMETERS 1V TO 600V DC	MILLI AMMETERS 1mA TO 500mA DC	AMMETERS 1A TO 50A DC
SR72	1.5	1.5	1.5	SR72/MR72/CR72/TR72/QR72	1.5	1.5	1.5	1.5
SR96	1.5	1.5	1.5	SR96/MR96/CR96/TR96/QR96	1.5	1.5	1.5	1.5
SR-144	1.5	1.5	1.5	SR144/MR144/CR144/TR144/QR144	1.5	1.5	1.5	1.5
SR65/SR80/SR100	2.5	2.5	2.5	MO 65 ,MR65/MR80/MR100	2.5	2.5	2.5	2.5
SO-65	2.5	2.5	2.5	MODEL - 110	1.5	1.5	1.5	1.5
P-100/L-100	1.5	1.5	1.5					

DIMENSIONS & MOUNTING ARRANGEMENTS

SIDE VIEW **TOP VIEW**

MODEL	DIMENSIONS				PANEL CUTOUT
	A	B	C	D	
SR72/MR72/CR72/TR72/QR72	72	66	5	53	68x68
SR96/MR96/CR96/TR96/QR96	96	90	5	53	92x92
SR144/MR144/CR144/TR144/QR144	144	136	7	43	138x138

SIDE VIEW **TOP VIEW**

TYPE	A	B	C
SO 65/MO 65	85	65	30
Model 110	135	110	40
P-100	130	100	40

SIDE VIEW

BACK VIEW

PANEL VIEW

MODEL	DIMENSION						PANEL CUTOUT					
	A	B	C	D	E	F	G	H	I	J	K	L
SR65/MR65	12	24	48	48	65	65	55	24	24	24	24	4
SR80/MR80	12	25	64	64	80	80	65	32	32	32	32	4
SR100/MR100	12.5	25	85	64	100	80	66	42.5	42.5	27	38	4

ALL DIMENSION IN MM

ANALOG PANEL METERS

<p>1st ALPHABET</p> <p>S : MOVING IRON TYPE OF AC METERS 90° SCALE M : MOVING COIL TYPE DC METER 90° SCALE C : MOVING COIL TYPE AC METER 90° SCALE T : MOVING COIL TYPE DC METER 240° SCALE Q : MOVING COIL RECTIFIER TYPE AC METER 240° SCALE P : PROJECTION TYPE AC METERS L : PEDASTAL TYPE AMMETERS</p> <p>2nd ALPHABET</p> <p>O : ROUND FLUSH R : SQUARE</p>	<p>9th ALPHABET</p> <p>: UNIT OF THE METERS : m - MILLIAMPERE A - AMPERE : V - VOLTMETER : K - KILO VOLT U - MICROAMPERE : S - MILLIVOLT : X - 50mV External Shunt : Y - 60 mV External Shunt : Z - 75mV External Shunt Type : B - CTR 1AMP. METER C - CTR 5AMP.</p>	
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"INDOTECH" MOVING IRON ANALOG PANEL METERS : AC

SQUARE SERIES

"INDOTECH" AMMETERS : AC							"INDOTECH" VOLTMETERS : AC										
72mm Square			96mm Square			144mm Square			72mm Square			96mm Square			144mm Square		
RANGE	PRODUCT CODE	Price Rs.	PRODUCT CODE	Price Rs.	PRODUCT CODE	Price Rs.	RANGE	PRODUCT CODE	Price Rs.	PRODUCT CODE	Price Rs.	PRODUCT CODE	Price Rs.	PRODUCT CODE	Price Rs.		
100mA	SR72 0100m	390	SR96 0100m	435	SR44 0100m	625	15V	SR72 0015V	355	SR96 0015V	390	SR44 0015V	680				
200mA	SR72 0200m	390	SR96 0200m	435	SR44 0200m	625	30V	SR72 0030V	355	SR96 0030V	390	SR44 0030V	680				
500mA	SR72 0500m	390	SR96 0500m	435	SR44 0500m	625	50V	SR72 0050V	355	SR96 0050V	390	SR44 0050V	680				
1A	SR72 0001A	320	SR96 0001A	360	SR44 0001A	570	100V	SR72 0100V	355	SR96 0100V	390	SR44 0100V	680				
2A	SR72 0002A	320	SR96 0002A	360	SR44 0002A	570	150V	SR72 0150V	355	SR96 0150V	390	SR44 0150V	680				
3A	SR72 0003A	320	SR96 0003A	360	SR44 0003A	570	200V	SR72 0200V	355	SR96 0200V	390	SR44 0200V	680				
5A	SR72 0005A	305	SR96 0005A	340	SR44 0005A	540	300V	SR72 0300V	355	SR96 0300V	390	SR44 0300V	680				
10A	SR72 0010A	310	SR96 0010A	360	SR44 0010A	570	500V	SR72 0500V	355	SR96 0500V	390	SR44 0500V	680				
15A	SR72 0015A	310	SR96 0015A	360	SR44 0015A	570	600V	SR72 0600V	355	SR96 0600V	390	SR44 0600V	680				
20A	SR72 0020A	315	SR96 0020A	380	SR44 0020A	570	750V	SR72 0750V	490	SR96 0750V	545	SR44 0750V	930				
25A	SR72 0025A	315	SR96 0025A	380	SR44 0025A	570	1000V	SR72 1000V	535	SR961000V	585	SR44 1000V	990				
30A	SR72 0030A	320	SR96 0030A	380	SR44 0030A	570											
40A	SR72 0040A	350	SR96 0040A	415	SR44 0040A	610											
50A	SR72 0050A	370	SR96 0050A	415	SR44 0050A	610											
60A	SR72 0060A	390	SR96 0060A	445	SR44 0060A	625											
75A	SR72 0075A	435	SR96 0075A	490	SR44 0075A	655											
100A	SR72 0100A	490	SR96 0100A	535	SR44 0100A	695											
CTR 1A	SR72 ****B	320	SR96 ****B	360	SR44 ****B	570											
CTR 5A	SR72 ****C	305	SR96 ****C	340	SR44 ****C	540											

NOTE : CTR 5A METERS, PLEASE MENTION CT RATIO IN PLACE OF "****C".
CTR 1A METERS, PLEASE MENTION CT RATIO IN PLACE OF "****B".

Standard Packing	60 Units	36 Units	24 Units	Standard Packing	60 Units	36 Units	24 Units
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"INDOTECH" AMMETERS : AC

"INDOTECH" VOLTMETERS : AC

ROUND SERIES

65mm Round			Round Projection			Round Pedestal			65mm Round			Round Projection			Round Pedestal		
RANGE	PRODUCT CODE	Price Rs.	PRODUCT CODE	Price Rs.	PRODUCT CODE	Price Rs.	RANGE	PRODUCT CODE	Price Rs.	PRODUCT CODE	Price Rs.	PRODUCT CODE	Price Rs.	PRODUCT CODE	Price Rs.		
1A	SO65 0001A	145	P100 0001A	225	L100 0001A	265	15V	SO65 0015V	170	P100 0015V	235	L100 0015V	275				
2A	SO65 0002A	145	P100 0002A	225	L100 0002A	265	30V	SO65 0030V	170	P100 0030V	235	L100 0030V	275				
3A	SO65 0003A	145	P100 0003A	225	L100 0003A	265	50V	SO65 0050V	170	P100 0050V	235	L100 0050V	275				
5A	SO65 0005A	145	P100 0005A	225	L100 0005A	265	100V	SO65 0100V	170	P100 0100V	235	L100 0100V	275				
10A	SO65 0010A	145	P100 0010A	225	L100 0010A	265	150V	SO65 0150V	170	P100 0150V	235	L100 0150V	275				
15A	SO65 0015A	145	P100 0015A	225	L100 0015A	265	200V	SO65 0200V	170	P100 0200V	235	L100 0200V	275				
20A	SO65 0020A	145	P100 0020A	225	L100 0020A	265	300V	SO65 0300V	170	P100 0300V	235	L100 0300V	275				
25A	SO65 0025A	145	P100 0025A	225	L100 0025A	265	500V	SO65 0500V	170	P100 0500V	235	L100 0500V	275				
30A	SO65 0030A	145	P100 0030A	225	L100 0030A	265	600V	SO65 0600V	170	P100 0600V	235	L100 0600V	275				
40A	SO65 0040A	185	P100 0040A	245	L100 0040A	285											
50A	SO65 0050A	185	P100 0050A	245	L100 0050A	285											
60A	SO65 0060A	-	P100 0060A	245	L100 0060A	285											
75A	SO65 0075A	-	P100 0075A	310	L100 0075A	350											
100A	SO65 0100A	-	P100 0100A	340	L100 0100A	380											

Standard Packing	60 Units	36 Units	24 Units	Standard Packing	60 Units	36 Units	24 Units
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"INDOTECH" MOVING COIL ANALOG PANEL METERS : DC

"INDOTECH" AMMETERS & MILLI AMMETERS : DC

"INDOTECH" MILLI VOLTMETERS & VOLTMETERS : DC

SQUARE SERIES

RANGE	72mm Square		96mm Square		144mm Square		RANGE	72mm Square		96mm Square		144mm Square	
	PRODUCT CODE	Price Rs.	PRODUCT CODE	Price Rs.	PRODUCT CODE	Price Rs.		PRODUCT CODE	Price Rs.	PRODUCT CODE	Price Rs.	PRODUCT CODE	Price Rs.
1mA	MR72 0001m	470	MR96 0001m	535	MR 44 0001m	810	50mV	MR72 0050S	470	MR96 0050S	535	MR44 0050S	810
5mA	MR72 0005m	490	MR96 0005m	560	MR 44 0005m	810	60mV	MR72 0060S	470	MR96 0060S	535	MR44 0060S	810
10mA	MR72 0010m	490	MR96 0010m	560	MR 44 0010m	810	75mV	MR72 0075S	470	MR96 0075S	535	MR44 0075S	810
100mA	MR72 0100m	490	MR96 0100m	560	MR 44 0100m	810	10V	MR72 0010V	495	MR96 0010V	535	MR44 0010V	810
500mA	MR72 0500m	490	MR96 0500m	560	MR 440500m	810	15V	MR72 0015V	495	MR96 0015V	535	MR44 0015V	810
1A	MR72 0001A	490	MR96 0001A	560	MR440001A	810	20V	MR72 0020V	495	MR96 0020V	535	MR44 0020V	810
5A	MR72 0005A	470	MR96 0005A	535	MR440005A	810	25V	MR72 0025V	495	MR96 0025V	535	MR44 0025V	810
10A	MR72 0010A	480	MR96 0010A	545	MR440010A	810	30V	MR72 0030V	495	MR96 0030V	535	MR44 0030V	810
15A	MR72 0015A	480	MR96 0015A	545	MR440015A	810	50V	MR72 0050V	495	MR96 0050V	535	MR44 0050V	810
20A	MR72 0020A	490	MR96 0020A	550	MR440020A	840	60V	MR72 0060V	495	MR96 0060V	535	MR44 0060V	810
25A	MR72 0025A	490	MR96 0025A	550	MR440025A	840	100V	MR72 0100V	495	MR96 0100V	535	MR44 0100V	810
30A	MR72 0030A	490	MR96 0030A	550	MR440030A	840	150V	MR72 0150V	495	MR96 0150V	535	MR44 0150V	840
40A	MR72 0040A	580	MR96 0040A	630	MR440040A	870	200V	MR72 0200V	495	MR96 0200V	550	MR44 0200V	840
50A	MR72 0050A	610	MR96 0050A	660	MR440050A	890	250V	MR72 0250V	495	MR96 0250V	550	MR44 0250V	840
50mV	MR72 ****X	470	MR96 ****X	535	MR44****X	810	300V	MR72 0300V	495	MR96 0300V	550	MR44 0300V	840
60mV	MR72 ****Y	470	MR96 ****Y	535	MR44****Y	810	500V	MR72 0500V	495	MR96 0500V	550	MR44 0500V	840
75mV	MR72 ****Z	470	MR96 ****Z	535	MR44****Z	810	600V	MR72 0600V	495	MR96 0600V	550	MR44 0600V	840
							750V	MR72 0750V	620	MR96 0750V	685	MR44 0750V	1050
							1000V	MR72 1000V	740	MR96 1000V	825	MR44 1000V	1250
Standard Packing	60 Units		36 Units		24 Units		Standard Packing	60 Units		36 Units		24 Units	

NOTE : PLEASE MENTION THE SHUNT RANGE IN PLACE OF "****"

"INDOTECH" MOVING COIL DC METERS : ROUND SERIES

ROUND SERIES

AMMETERS & MILLI AMMETERS : DC

VOLTMETER : DC

RANGE	65mm Round		110mm Round		RANGE	65mm Round		110mm Round	
	PRODUCT CODE	Price Rs.	PRODUCT CODE	Price Rs.		PRODUCT CODE	Price Rs.	PRODUCT CODE	Price Rs.
1mA	MO65 0001m	375	M110 0001m	675	50mV	MO65 0050S	375	M110 0050S	675
5mA	MO65 0005m	375	M110 0005m	675	60mV	MO65 0060S	375	M110 0060S	675
100mA	MO65 0100m	375	M110 0100m	675	75mV	MO65 0075S	375	M110 0075S	675
500mA	MO65 0500m	375	M110 0500m	675	10V	MO65 0010V	375	M110 0010V	675
1A	MO65 0001A	375	M110 0001A	675	20V	MO65 0020V	375	M110 0020V	675
5A	MO650005A	375	M110 0005A	675	30V	MO65 0030V	375	M110 0030V	675
10A	MO650010A	375	M110 0010A	675	100V	MO65 0100V	375	M110 0100V	675
20A	MO65 0020A	405	M110 0020A	675	150V	MO65 0150V	405	M110 0150V	675
30A	MO65 0030A	405	M110 0030A	675	200V	MO65 0200V	405	M110 0200V	675
50mV	MO65 ****X	375	M110 ****X	675	300V	MO65 0300V	405	M110 0300V	675
60mV	MO65 ****Y	375	M110 ****Y	675	500V	MO65 0500V	405	M110 0500V	675
75mV	MO65 ****Z	375	M110 ****Z	675	600V	MO65 0600V	405	M110 0600V	675
Standard Packing	60 Units		24 Units		Standard Packing	60 Units		24 Units	

- NOTE : 1. DOUBLE RANGE CAN BE PROVIDED IN MOVING COIL METERS AT AN EXTRA COST OF Rs. 125/-
 2. CENTRE ZERO IN MOVING COIL METERS CAN BE SUBLIED AT AN EXTRA COST OF Rs. 50/-
 3. MICRO AMMETERS DC SHALL BE QUOTED AGAINST SPECIFIC REQUIREMENTS .
 4. CASE OF MR-144 METER METER IS MADE OF ABS .
 5. THE SPARE DIALS FOR MR - 72 WILL COST Rs . 15/-, FOR MR-96 Rs. 20/- AND MR -144 RS. 30/-

"INDOTECH" MOVING COIL 240° ANALOG PANEL METERS : AC

"INDOTECH" MOVING COIL RECTIFIER TYPE AC AMMETERS						"INDOTECH" MOVING COIL RECTIFIER TYPE AC VOLTMETERS							
1A	QR 72 0001A	1040	QR 96 0001A	1140	QR 44 0001A	1540	15V	QR 72 0015V	940	QR 96 0015V	1040	QR 44 0015V	1440
5A	QR 72 0005A	1040	QR 96 0005A	1140	QR 44 0005A	1540	30V	QR 72 0030V	940	QR 96 0030V	1040	QR 44 0030V	1440
10A	QR 72 0010A	1040	QR 96 0010A	1140	QR 44 0010A	1540	50V	QR 72 0050V	940	QR 96 0050V	1040	QR 44 0050V	1440
15A	QR 72 0015A	1040	QR 96 0015A	1140	QR 44 0015A	1540	100V	QR 72 0100V	940	QR 96 0100V	1040	QR 44 0100V	1440
20A	QR 72 0020A	1040	QR 96 0020A	1140	QR 44 0020A	1540	150V	QR 72 0150V	940	QR 96 0150V	1040	QR 44 0150V	1440
30A	QR 72 0030A	1140	QR 96 0030A	1240	QR 44 0030A	1640	200V	QR 72 0200V	940	QR 96 0200V	1040	QR 44 0200V	1440
CTR - 1A	QR 72 ****B	1040	QR 96 ****B	1140	QR 44 ****B	1540	300V	QR 72 0300V	940	QR 96 0300V	1040	QR 44 0300V	1440
CTR - 5A	QR 72 ****C	1040	QR 96 ****C	1140	QR 44 ****C	1540	500V	QR 72 0500V	940	QR 96 0500V	1040	QR 44 0500V	1440
Standard Packing	60 Units		36 Units		24 Units		Standard Packing	60 Units		36 Units		24 Units	

Note : FOR CTR 1A METERS, PLEASE MENTION CT RATIO IN PLACE OF *****B
 FOR CTR 5A METERS, PLEASE MENTION CT RATIO IN PLACE OF *****C

"INDOTECH" MOVING COIL 240° ANALOG PANEL METERS : DC

"INDOTECH" AMMETERS & MILLI AMMETERS : DC							"INDOTECH" MILLI VOLTMETERS & VOLTMETERS : DC						
RANGE	72mm Square		96mm Square		144mm Square		RANGE	72mm Square		96mm Square		144mm Square	
	PRODUCT CODE	Price Rs.	PRODUCT CODE	Price Rs.	PRODUCT CODE	Price Rs.		PRODUCT CODE	Price Rs.	PRODUCT CODE	Price Rs.	PRODUCT CODE	Price Rs.
1mA	TR 72 0001m	790	TR 96 0001m	890	TR 44 0001m	1290	50mV	TR 72 0050S	790	TR 96 0050S	890	TR 44 0050S	1290
5mA	TR 72 0005m	790	TR 96 0005m	890	TR 44 0005m	1290	60mV	TR 72 0060S	790	TR 96 0060S	890	TR 44 0060S	1290
10mA	TR 72 0010m	790	TR 96 0010m	890	TR 44 0010m	1290	75mV	TR 72 0075S	790	TR 96 0075S	890	TR 44 0075S	1290
100mA	TR 72 0100m	790	TR 96 0100m	890	TR 44 0100m	1290	10V	TR 72 0010V	790	TR 96 0010V	890	TR 44 0010V	1290
500mA	TR 72 0500m	790	TR 96 0500m	890	TR 44 0500m	1290	15V	TR 72 0015V	790	TR 96 0015V	890	TR 44 0015V	1290
1A	TR 72 0001A	790	TR 96 0001A	890	TR 44 0001A	1290	20V	TR 72 0020V	790	TR 96 0020V	890	TR 44 0020V	1290
5A	TR 72 0005A	790	TR 96 0005A	890	TR 44 0005A	1290	25V	TR 72 0025V	790	TR 96 0025V	890	TR 44 0025V	1290
10A	TR 72 0010A	790	TR 96 0010A	890	TR 44 0010A	1290	30V	TR 72 0030V	790	TR 96 0030V	890	TR 44 0030V	1290
15A	TR 72 0015A	790	TR 96 0015A	890	TR 44 0015A	1290	50V	TR 72 0050V	790	TR 96 0050V	890	TR 44 0050V	1290
20A	TR 72 0020A	790	TR 96 0020A	890	TR 44 0020A	1290	60V	TR 72 0060V	790	TR 96 0060V	890	TR 44 0060V	1290
25A	TR 72 0025A	790	TR 96 0025A	890	TR 44 0025A	1290	100V	TR 72 0100V	790	TR 96 0100V	890	TR 44 0100V	1290
30A	TR 72 0030A	790	TR 96 0030A	890	TR 44 0030A	1290	150V	TR 72 0150V	790	TR 96 0150V	890	TR 44 0150V	1190
40A	TR 72 0040A	870	TR 96 0040A	970	TR 44 0040A	1370	200V	TR 72 0200V	790	TR 96 0200V	890	TR 44 0200V	1190
50A	TR 72 0050A	930	TR 96 0050A	1030	TR 44 0050A	1430	250V	TR 72 0250V	790	TR 96 0250V	890	TR 44 0250V	1190
50mV	TR 72 ****X	790	TR 96 ****X	890	TR 44 ****X	1290	300V	TR 72 0300V	790	TR 96 0300V	890	TR 44 0300V	1190
60mV	TR 72 ****Y	790	TR 96 ****Y	890	TR 44 ****Y	1290	500V	TR 72 0500V	790	TR 96 0500V	890	TR 44 0500V	1190
75mV	TR 72 ****Z	790	TR 96 ****Z	890	TR 44 ****Z	1290	600V	TR 72 0600V	790	TR 96 0600V	890	TR 44 0600V	1190
Standard Packing	60 Units		36 Units		24 Units		Standard Packing	60 Units		36 Units		24 Units	

NOTE : PLEASE MENTION THE SHUNT RANGE IN PLACE OF "****"

"INDOTECH" FREQUENCY METERS

"INDOTECH" Frequency Meters are of two types :

(a) VIBRATING REED TYPE :

The element of these instruments consist of steel reeds which are in the field of an electromagnet. These reeds vibrate in resonance with the energizing A.C. Only the reed whose natural frequency corresponds with the frequency of the A.C. supply will vibrate at full amplitude indicating the correct frequency on the dial.

SPECIFICATIONS :

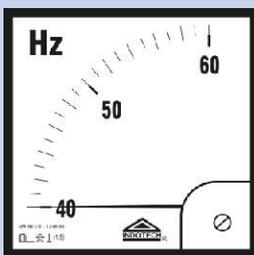
- MODELS AVAILABLE : SR72, SR96 & SR144
- ACCURACY : Class 1.0 as per BIS-1248/03
- VA BURDEN : 3.0 VA at 230V.
- RANGES AVAILABLE : 45-50-55, or 47-50-53 Hz

(b) TRANSDUCER TYPE :

This basically consists of electronic circuit coupled with moving coil meter. Oscillator circuit gives the signal according to the frequency of supply which is indicated on the dial of the meter.

SPECIFICATIONS :

- MODELS AVAILABLE : MR72, MR96 & MR144
- ACCURACY : Class 1.0 as per BIS-1248/03
- SCALE RANGE : 45-50-55 Hz
- RATED VOLTAGE : 110, 230 or 415V, AC. Single Phase.



PRICE LIST													
TRANSDUCER TYPE						REED TYPE							
RANGE	72mm Square		96mm Square		144mm Square		RANGE	72mm Square		96mm Square		144mm Square	
	PRODUCT CODE	Price Rs.	PRODUCT CODE	Price Rs.	PRODUCT CODE	Price Rs.		PRODUCT CODE	Price Rs.	PRODUCT CODE	Price Rs.	PRODUCT CODE	Price Rs.
45-50-55Hz	MR724555 F	720	MR96 4555F	920	MR444555 F	1210	45-50-55Hz	SR72 4555F	510	SR96 4555F	555	SR44 4555F	785
Standard Packing	60 Units		36 Units		24 Units		Standard Packing	60 Units		36 Units		24 Units	

NOTE : 1. FOR DIMENSION REFER PAGE OF VOLTMETERS & AMMETERS
2. FOR MORE DETAILS , ASK FOR ANX OF FREQ METER CATALOG

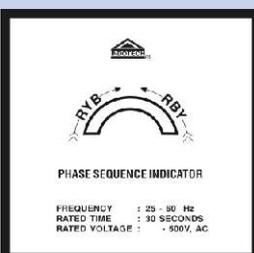
"INDOTECH" PHASE SEQUENCE INDICATORS

CONSTRUCTION : Phase sequence indicator is housed in 96 x 96 mm. square ABS moulded case with bakelite plate. Three separate leads of Red, Yellow & Blue coloured rubber sheathed clips are provided for each phase. A white disc is mounted between two synthetic sapphire jewel bearings for friction free rotation and marked with black arrow.

STANDARD PACKING : 36 UNITS

PRICE : Rs. 750/-

NOTE : 1. FOR MORE DETAILS , ASK FOR PHASE SEQUENCE INDICATOR CATALOG



"INDOTECH" SHUNTS

GENERAL:

"INDOTECH" Shunts produce millivolt drop against its terminals when current is passed through it. It is used for the measurement of DC currents. These are available from 50mA to 10,000 Amps having standard millivolt drop ranging from 50mV to 200mV.

CONSTRUCTION:

"INDOTECH" External Shunts consist of manganin rods soldered or silver brazed to brass end blocks. The shunts are artificially aged after manufacture and then tested on full load. Shunts are calibrated with leads of standard resistance of 0.025 ohms. The resistance is taken into account while calibrating the shunt.

STANDARD : IS 1248

DIMENSIONS IN mm AS PER IS 1248 FOR 75 mV DROP SHUNTS

'I' TYPE 50mA to 150A (Refer fig. 1)

Rating	A	B	C	D	E	F
50mA-30A	28	20	8	88	100	6
40A-150A	33	20	8	80	120	8

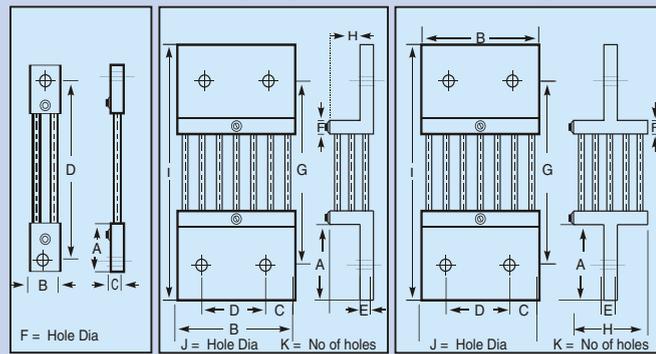
'L' TYPE 200A to 3000A (Refer fig. 2)

Rating	A	B	C	D	E	F	G	H	I	J	K
200-300	55	30	15	--	10	10	125	30	165	12	1
400-750	55	40	20	--	10	10	125	30	165	16	1
800-1000	65	60	30	--	10	10	135	30	185	20	2
1000-1500	65	90	21	48	10	10	135	30	185	20	2
1500-3000	65	120	30	60	10	10	135	30	185	20	2

'T' TYPE 4000A to 10,000A (Refer fig. 3)

Rating	A	B	C	D	E	F	G	H	I	J	K
4000-5000	65	120	30	60	15	10	135	60	185	20	2
6000-7500	70	154	25	52	25	15	145	130	195	20	3
8000-10000	75	206	25	52	30	20	155	170	205	20	4
12500-15000	75	310	25	52	30	20	155	170	205	20	6

'I' TYPE 'L' TYPE 'T' TYPE



NOTE : THE DIMENSIONS FOR 50mV & 60mV ON REQUEST

PRICE LIST

NOTE :

1st TO 4th ALPHABET 'SHNT' : SHUNT
5th TO 8th DIGIT : RANGE OF THE SHUNT

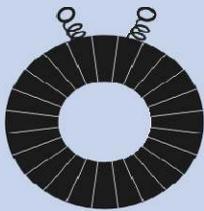
HOW TO SELECT RANGE

9th ALPHABET : UNIT OF THE SHUNT
'X' INDICATE : 50mV Drop
'Y' INDICATE : 60mV Drop
'Z' INDICATE : 75mV Drop

RANGE	PRODUCT CODE 50mV Drop	PRODUCT CODE 60mV Drop	PRODUCT CODE 75mV Drop	PRICE Rs.	STANDARD PACKING (PCS.)	RANGE	PRODUCT CODE	PRODUCT CODE	PRODUCT CODE	PRICE Rs.	STANDARD PACKING (PCS.)
1A	SHNT 0001X	SHNT 0001Y	SHNT 0001Z	175	100	400A	SHNT 0400X	SHNT 0400Y	SHNT 0400Z	950	50
5A	SHNT 0005X	SHNT 0005Y	SHNT 0005Z	175	100	500A	SHNT 0500X	SHNT 0500Y	SHNT 0500Z	1025	50
10A	SHNT 0010X	SHNT 0010Y	SHNT 0010Z	175	100	600A	SHNT 0600X	SHNT 0600Y	SHNT 0600Z	1100	50
15A	SHNT 0015X	SHNT 0015Y	SHNT 0015Z	175	100	750A	SHNT 0750X	SHNT 0750Y	SHNT 0750Z	1150	50
20A	SHNT 0020X	SHNT 0020Y	SHNT 0020Z	175	100	800A	SHNT 0800X	SHNT 0800Y	SHNT 0800Z	1750	25
25A	SHNT 0025X	SHNT 0025Y	SHNT 0025Z	175	100	1000A	SHNT 1000X	SHNT 1000Y	SHNT 1000Z	1850	25
30A	SHNT 0030X	SHNT 0030Y	SHNT 0030Z	175	100	1200A	SHNT 1200X	SHNT 1200Y	SHNT 1200Z	2560	25
40A	SHNT 0040X	SHNT 0040Y	SHNT 0040Z	210	100	1500A	SHNT 1500X	SHNT 1500Y	SHNT 1500Z	2750	25
50A	SHNT 0050X	SHNT 0050Y	SHNT 0050Z	210	100	2000A	SHNT 2000X	SHNT 2000Y	SHNT 2000Z	3750	25
60A	SHNT 0060X	SHNT 0060Y	SHNT 0060Z	230	100	2500A	SHNT 2500X	SHNT 2500Y	SHNT 2500Z	3980	25
75A	SHNT 0075X	SHNT 0075Y	SHNT 0075Z	275	100	3000A	SHNT 3000X	SHNT 3000Y	SHNT 3000Z	4320	10
100A	SHNT 0100X	SHNT 0100Y	SHNT 0100Z	295	100	4000A	SHNT 4000X	SHNT 4000Y	SHNT 4000Z	7750	10
150A	SHNT 0150X	SHNT 0150Y	SHNT 0150Z	355	100	5000A	SHNT 5000X	SHNT 5000Y	SHNT 5000Z	16750	5
200A	SHNT 0200X	SHNT 0200Y	SHNT 0200Z	645	50	6000A	SHNT 6000X	SHNT 6000Y	SHNT 6000Z	17750	5
250A	SHNT 0250X	SHNT 0250Y	SHNT 0250Z	695	50	7500A	SHNT 7500X	SHNT 7500Y	SHNT 7500Z	18750	5
300A	SHNT 0300X	SHNT 0300Y	SHNT 0300Z	710	50	10000A	SHNT 10000X	SHNT 10000Y	SHNT 10000Z	27800	5

NOTE : 1. 'I' type shunts can be supplied mounted on a bakelite base if desired.
2. Shunts are also available in 100mV, 150mV, 200mV, drop .
3. Shunts with non-standard current ratings/mV can be supplied on request.
4. All dimensions in mm.

"INDOTECH" CURRENT TRANSFORMERS



GENERAL:

"INDOTECH" Current Transformer reproduces proportionate primary current on its secondary side required for extending the range of the instruments/protective devices connected in its secondary circuit. CT can also be used for isolating the devices connected in the secondary circuit from the network system into which the C.T. is connected. CT's are available in Tape Wound as well as Cast Resin type. Basically, Cts are of two types:

1. BAR PRIMARY TYPE :



Coil is wound on a toroidal core of high per-meability silicon steel. The Bar which is passed through the core, acts as single turn on the primary side and the turns on the core act as secondary. BPL CT's are available both for metering as well as for protective purposes.

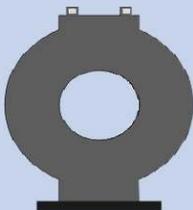
(a) METERING CT's :

These CT's are meant for feeding measuring instruments. Accuracy class of the CT will be selected on the basis of the accuracy class of the instrument to be operated. When the instrument is installed far away from the CT, the secondary is chosen as 1A instead of 5A.



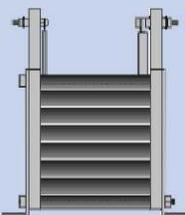
(b) PROTECTION CT's (PS CLASS):

These CT's are meant for operating the protective devices viz., Circuit Breakers and Relays etc. The magnitude and the nature of fault to be controlled and the electrical characteristic of the device decide the class and type of Current Transformer.



2. WOUND PRIMARY CT's :

When the ratio is low it becomes difficult to obtain good result with the single primary turn. For that purpose wound primary Ct's are used where both primary & secondary turns are wound on the toroidal core. The range available are from 5/5A to 100/5A. Also Secondary 1A can be provided. Optional mounting arrangements are provided as the CT is mounted between two bakelite plates & brass terminals are provided connections of primary & secondary.



3. CORE BALANCED CT's (CBCT'S) :

"INDOTECH" Core Balanced CT's are available to operate the Earth Leakage Relays. Indotech CBCT's are available in Tape Wound & Resin Cast Version.



LIMITS OF ERROR & PHASE DISPLACEMENT As per ISS : 2705/81								
CLASS	Percentage Current Error at Percentage of Rated Current				Phase displacement in Minutes at percent of Rated Current			
	5%	20%	100%	120%	5%	20%	100%	120%
0.1	0.4	0.2	0.1	0.1	15	8	5	5
0.2	0.75	0.35	0.2	0.2	30	15	10	10
0.5	1.5	0.75	0.5	0.5	90	45	30	30
1.0	3.0	1.5	1.0	1.0	180	90	60	60

Note : There is no phase displacement test specified for class 3.0 & 5.0 CT's as per ISS : 2705/92

"INDOTECH" BAR PRIMARY LOW TENSION CURRENT TRANSFORMERS

1st ALPHABET

- : C - TAPE INSULATED BAR PRIMARY
- : R - RESIN CAST BAR PRIMARY
- : W- TAPE INSULATED WOUND PRIMARY
- : M - MOULDED CASE BAR PRIMARY ROUND
- : D - MOULDED CASE BAR PRIMARY RECTANGULAR DIN

HOW TO SELECT THE MODEL / RANGE

- S : TAPE INSULATED BAR PRIMARY RECTANGULAR
- T : RESIN CAST BAR PRIMARY RECTANGULAR

2rd TO 5th : RANGE OF CT

6th : ACCURACY CLASS - 1 FOR CLASS 1, 5 FOR CLASS 5 & 'P' FOR 5P10

7 & 8th : VA - BURDEN

9th : SECONDARY - '5' FOR 5A & '1' FOR 1A

VOLTAGE CLASS : 660 V ISS : 2705 / 92 SECONDARY : 5A

TAPE WOUND ROUND METERING CT'S							RESIN CAST ROUND METERING CT'S						
CT RATIO	PRODUCT CODE	ID	ACCURACY CLASS	RATED BURDEN VA	PRICE Rs.	STANDARD PACKING (PCS.)	CT RATIO	PRODUCT CODE	ID	ACCURACY CLASS	RATED BURDEN VA	PRICE Rs.	STANDARD PACKING (PCS.)
30/5A	C00305055	30	5	5	245	48	30/5A	R00305055	30	5	5	470	24
40/5A	C00405055	30	5	5	245	48	40/5A	R00405055	30	5	5	470	24
50/5A	C00505055	30	5	5	245	48	50/5A	R00505055	30	5	5	470	24
60/5A	C00605055	30	5	5	245	48	60/5A	R00605055	30	5	5	470	24
75/5A	C00755055	30	5	5	245	48	75/5A	R00755055	30	5	5	470	24
100/5A	C00100155	30	1	5	255	48	100/5A	R01001055	30	1	5	470	24
150/5A	C01501055	30	1	10	265	48	150/5A	R01501055	30	1	5	480	24
200/5A	C02001105	30	1	10	270	48	200/5A	R02001105	30	1	10	490	24
250/5A	C02501105	50	1	10	275	36	250/5A	R02501105	50	1	10	505	24
300/5A	C03001105	50	1	15	280	36	300/5A	R03001105	50	1	10	520	24
400/5A	C04001155	60	1	15	295	36	400/5A	R04001155	60	1	15	580	24
500/5A	C05001155	60	1	15	310	36	500/5A	R05001155	60	1	15	595	24
600/5A	C06001155	60	1	15	320	36	600/5A	R06001155	60	1	15	605	24
800/5A	C08001155	105	1	15	350	24	800/5A	R08001155	105	1	15	730	12
1000/5A	C10001155	105	1	15	365	24	1000/5A	R10001155	105	1	15	750	12
1200/5A	C12001155	105	1	15	410	24	1200/5A	R12001155	105	1	15	770	12
1250/5A	C12501155	105	1	15	450	24	1250/5A	R12501155	105	1	15	850	12
1600/5A	C16001155	115	1	15	525	24	1600/5A	R16001155	115	1	15	930	12
2000/5A	C20001155	115	1	15	620	24	2000/5A	R20001155	115	1	15	1040	12
2500/5A	C25001155	130	1	15	930	12	2500/5A	R25001155	130	1	15	1310	12
3000/5A	C30001155	130	1	15	1065	12	3000/5A	R30001155	130	1	15	1410	12
3200/5A	C32001155	130	1	15	1220	12	3200/5A	R32001155	130	1	15	1560	12
4000/5A	C40001155	150	1	15	1490	12	4000/5A	R40001155	150	1	15	1840	12
5000/5A	C50001155	150	1	15	1960	12	5000/5A	R50001155	150	1	15	2450	12
6000/5A	C60001155	180	1	15	2560	12	6000/5A	R60001155	180	1	15	3250	12
6300/5A	C63001155	180	1	15	2860	12	6300/5A	R63001155	180	1	15	3650	12

TAPE WOUND RECTUNGULAR METERING CT'S							RESIN CAST RECTUNGULAR METERING CT'S						
CT RATIO	PRODUCT CODE	BORE	ACCURACY CLASS	RATED BURDEN VA	PRICE Rs.	STANDARD PACKING (PCS.)	CT RATIO	PRODUCT CODE	BORE	ACCURACY CLASS	RATED BURDEN VA	PRICE Rs.	STANDARD PACKING (PCS.)
800/5A	S08001155	105x40	1	15	440	36	800/5A	T12001155	105x40	1	15	910	24
1000/5A	S10001155	105x40	1	15	480	24	1000/5A	T12501155	105x40	1	15	930	24
1200/5A	S12001155	105x40	1	15	510	24	1200/5A	T12001155	105x40	1	15	960	24
1250/5A	S12501155	105x40	1	15	560	24	1250/5A	T12501155	105x40	1	15	1060	24
1600/5A	S16001155	105x40	1	15	660	24	1600/5A	T16001155	105x40	1	15	1160	24
2000/5A	S20001155	105x60	1	15	780	24	2000/5A	T20001155	105x60	1	15	1290	24
2500/5A	S25001155	105x60	1	15	1160	24	2500/5A	T25001155	105x60	1	15	1630	24
3000/5A	S30001155	160x65	1	15	1330	12	3000/5A	T30001155	160x65	1	15	1760	12
3200/5A	S32001155	160x65	1	15	1520	12	3200/5A	T32001155	160x65	1	15	1820	12
4000/5A	S40001155	160x90	1	15	1860	12	4000/5A	T40001155	160x90	1	15	2050	12
5000/5A	S50001155	160x90	1	15	2450	12	5000/5A	T50001155	160x90	1	15	2570	12

MOULDED CASE ROUND METERING CT'S							DIN TYPE MOULDED CASE METERING CT'S						
CT RATIO	PRODUCT CODE	BORE	ACCURACY CLASS	RATED BURDEN VA	PRICE Rs.	STANDARD PACKING (PCS.)	DIN SIZE	CT RATIO	PRODUCT CODE	ACCURACY CLASS	RATED BURDEN VA	PRICE Rs.	STANDARD PACKING (PCS.)
30/5A	M00305055	31	5	5	305	48	62/20	30/5A	D00305055	5	2.5	345	48
40/5A	M00405055	31	5	5	305	48	62/20	40/5A	D00405055	5	2.5	345	48
50/5A	M00505055	31	5	5	305	48	62/20	50/5A	D00505055	5	2.5	345	48
60/5A	M00605055	31	5	5	305	48	62/20	60/5A	D00605055	5	2.5	345	48
75/5A	M00755055	31	5	5	305	48	62/20	75/5A	D00755055	5	2.5	345	48
100/5A	M00100155	31	1	5	315	48	62/30	100/5A	D00100155	1	5	375	48
150/5A	M01501055	31	1	5	325	48	62/30	150/5A	D01501055	1	5	375	48
200/5A	M02001105	31	1	10	330	48	62/30	200/5A	D02001105	1	5	375	48
250/5A	M02501105	43	1	5	335	36	62/40	250/5A	D02501105	1	5	425	36
300/5A	M03001105	43	1	10	340	36	62/40	300/5A	D03001105	1	5	425	36
250/5A	M02501055	57	1	10	355	36	74/50	400/5A	D02501055	1	7.5	425	36
300/5A	M03001105	57	1	10	365	36	74/50	500/5A	D03001105	1	7.5	450	36
400/5A	M04001155	57	1	15	375	36	74/50	600/5A	D04001155	1	7.5	450	36
500/5A	M05001155	57	1	15	390	24	74/60	800/5A	D05001155	1	7.5	470	24
600/5A	M06001155	57	1	15	400	24	74/60	1000/5A	D06001155	1	7.5	470	24
800/5A	M08001155	85	1	15	440	24	74/60	1200/5A	D08001155	1	7.5	540	24
1000/5A	M10001155	85	1	15	455	24	74/60	1250/5A	D10001155	1	10	540	24
1200/5A	M12001155	109	1	15	570	24	84/100	1600/5A	D12001155	1	10	540	24
1250/5A	M12501155	109	1	15	570	24	84/100	2000/5A	D12501155	1	10	540	24
1600/5A	M16001155	109	1	15	625	12	138/100	1600/5A	D16001155	1	10	625	12
2000/5A	C20001155	109	1	15	720	12	138/100	2000/5A	D20001155	1	10	725	12
2500/5A	C25001155	109	1	15	1130	12	138/100	2500/5A	D25001155	1	10	1150	12
3000/5A	C30001155	109	1	15	1165	12	138/100	3000/5A	D30001155	1	10	1320	12
3200/5A	C32001155	109	1	15	1320	12	138/100	3200/5A	D32001155	1	10	1520	12

"INDOTECH" BAR PRIMARY PROTECTION TYPE CURRENT TRANSFORMERS

RATED BURDEN : 15VA
VOLTAGE CLASS : 660V

INSULATION LEVEL : 0.66/3KV
ISS : 2705/92

ACCURACY CLASS : 5P-10
ACC LIMIT FACTOR : 10

TAPE WOUND ROUND PROTECTION CT'S (BPL)

RESIN CAST ROUND METERING CT'S (BPL)

SECONDARY : 5A					SECONDARY : 5A				
CT RATIO	PRODUCT CODE	ID	PRICE Rs.	STANDARD PACKING (PCS.)	CT RATIO	PRODUCT CODE	ID	PRICE Rs.	STANDARD PACKING (PCS.)
200/5A	C0200 P155	50	790	24	200/5A	R0200 P155	50	1310	24
250/5A	C0250 P155	50	810	24	250/5A	R0250 P155	50	1330	24
300/5A	C0300 P155	50	840	24	300/5A	R0300 P155	50	1550	24
400/5A	C0400 P155	60	870	24	400/5A	R0400 P155	60	1570	24
500/5A	C0500 P155	75	920	24	500/5A	R0500 P155	75	1620	24
600/5A	C0600 P155	75	950	24	600/5A	R0600 P155	75	1650	24
800/5A	C0800 P155	105	975	12	800/5A	R0800 P155	105	1670	12
1000/5A	C1000 P155	105	1010	12	1000/5A	R1000 P155	105	1850	12
1200/5A	C1200 P155	105	1040	12	1200/5A	R1200 P155	105	1870	12
1600/5A	C1600 P155	115	1075	12	1600/5A	R1600 P155	115	1910	12
2000/5A	C2000 P155	115	1240	12	2000/5A	R2000 P155	115	2050	12
2500/5A	C2500 P155	130	1860	12	2500/5A	R2500 P155	130	2110	12
3200/5A	C3200 P155	130	2350	12	3200/5A	R3200 P155	130	2610	12

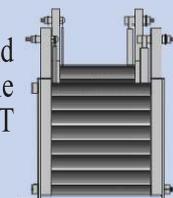
TAPE WOUND RECTUNGULAR METERING CT'S

RESIN CAST RECTUNGULAR METERING CT'S

CT RATIO	PRODUCT CODE	BORE	ACCURACY CLASS	RATED BURDEN VA	PRICE Rs.	STANDARD PACKING (PCS.)	CT RATIO	PRODUCT CODE	BORE	ACCURACY CLASS	RATED BURDEN VA	PRICE Rs.	STANDARD PACKING (PCS.)
800/5A	S0800P155	105x40	1	15	1210	24	800/5A	T1200P155	105x40	1	15	2080	12
1000/5A	S1000P155	105x40	1	15	1260	24	1000/5A	T1250P155	105x40	1	15	2290	12
1200/5A	S1200P155	105x40	1	15	1290	24	1200/5A	T1200P155	105x40	1	15	2340	12
1250/5A	S1250P155	105x40	1	15	1340	24	1250/5A	T1250P155	105x40	1	15	2340	12
1600/5A	S1600P155	105x40	1	15	1380	24	1600/5A	T1600P155	105x40	1	15	2380	12
2000/5A	S2000P155	105x60	1	15	1520	24	2000/5A	T2000P155	115x60	1	15	2560	12
2500/5A	S2500P155	105x60	1	15	1520	24	2500/5A	T2500P155	105x60	1	15	2630	12
3000/5A	S3000P155	160x65	1	15	0000	12	3000/5A	T3000P155	160x65	1	15	0000	12
3200/5A	S3200P155	160x65	1	15	1680	12	3200/5A	T3200P155	160x65	1	15	3290	12
4000/5A	S4000P155	160x90	1	15	2260	12	4000/5A	T4000P155	160x90	1	15	3910	12
5000/5A	S5000P155	160x90	1	15	3180	12	5000/5A	T5000P155	160x90	1	15	4870	12

"INDOTECH" WOUND PRIMARY LOW TENSION CURRENT TRANSFORMERS

When the ratio is low it becomes difficult to obtain good results with the single primary turn. For that purpose wound primary CT's are used where both primary and secondary turns are wound on the torroidal core. The ranges available are from 5/5A to 100/5A. Also Secondary 1A can be provided. Optional mounting arrangements are provided as the CT is mounted between two bakelite plates and brass terminals are provided for connections of primary & secondary.



WOUND PRIMARY LOW TENSION TAPE WOUND METERING CT'S

RATED BURDEN : 15VA CLASS 1:0 SECONDARY : 5A

CT RATIO	CODE WITH MOUNTING	PRICE Rs.	CT RATIO	CODE WITH MOUNTING	PRICE Rs.	CT RATIO	CODE WITH MOUNTING	PRICE Rs.	CT RATIO	CODE WITH MOUNTING	PRICE Rs.
5/5A	W 0051155	850	20/5A	W 00201155	850	50/5A	W 00501155	970	100/5A	W 01001155	1010
10/5A	W 00101155	850	30/5A	W 00301155	910	60/5A	W 00601155	970			
15/5A	W 00151155	850	40/5A	W 00401155	910	75/5A	W 00751155	1010			
STANDARD PACKING	12 Units		STANDARD PACKING	12 Units		STANDARD PACKING	12 Units		STANDARD PACKING	12 Units	

"INDOTECH" CORE BALANCED CURREN TRANSFORMERS (CBCT 'S)

"INDOTECH" Core Balanced CT 's are available to operate the Earth Leakage Relays .
"INDOTECH" CBCT 's are available in Tape Wound & Resin Cast Versions.

SPECIFICATION :-

System Voltage : 720 V Maximum	Distance Between : < 50 meters
Insulation Voltage : 3 kV for 1 min	Toroid and Relay
System Frequency : 50 Hz	Operating Temperature : -20° C to + 70 °C
Max Current : 1 KA Continous	Humidity : < 95 % RH
5 KA for 1.5 sec	Enclosure : Flame Retardant Glass Filled ABS
Terminal Conductor : < 2.5mm	Complaint with : IEC 44 - 1 & IEC 185
Current Ratio : 1/1000, 1/ 600 any other on request	Mounting : Four Fixing Holes

ID	TAPE WOUND	PRICE Rs.	ID	RESIN CAST	PRICE Rs.
35mm	TWCBCT035	850	35mm	RCCBCT035	1150
70mm	TWCBCT070	1050	70mm	RCCBCT070	1450
120mm	TWCBCT120	1650	120mm	RCCBCT120	2050
210mm	TWCBCT210	2850	210mm	RCCBCT210	3550
STANDARD PACKING	12 Units		STANDARD PACKING	12 Units	

"INDOTECH" CONTINUOUSLY VARIABLE VOLTAGE AUTO TRANSFORMERS VARIACS

GENERAL :

INDOTECH Continuously Variable Voltage Auto Transformer is a device that delivers the voltage the voltage from 0 to 270 volts in a Single Phase & 0 to 470 volts in 3 phase continuously without any break in output voltage . This variation is obtained by the turning of the knob in less than a complete circle rotation . These units are very compact & very economical comparing to the conventional transformers .

CONSTRUCTION :

"INDOTECH" Variacs are made of high quality strip wound cold rolled grain oriented (CRGO) steel . The core is annealed so that iron losses & no load losses are bare minimum . The track is smoothly grounded for trouble free movement of the carbon brush . The carbon brush is self adjustable to get minimised wear & tear & the brush is in full contact with the track .

RANGES :

Current ratings available are 2,4,6,8,10,15,20,& 28 Amps in Flush enclosed & Oil Cooled Models . Ranges 40,50,60,75,100,150,200,300,400,500,600,800,1000 Amps are available in Oil Cooled Models Only .



SINGLE PHASE MODELS							
CURRENT RATING IN AMP	FLUSH BACK OF PANEL OPEN		Portable Table/Floor Mounting With Enclosure		Oil Cooled Without Oil		
	TYPE	PRICE	TYPE	PRICE	TYPE	PRICE	Approx. Oil Qty.
2	GVAR002D1F	1500	GVAR002D1P	2300			
4	GVAR004D1F	3200	GVAR004D1P	3900			
8	GVAR008D1F	4050	GVAR008D1P	4900			
10	GVAR010D1F	4900	GVAR010D1P	5900			
15	GVAR015D1F	6900	GVAR015D1P	7800			
20	GVAR020D1F	8800	GVAR020D1P	9600			
28	GVAR028D1F	11700	GVAR028D1P	12500			
35	GVAR035D1F	12500	GVAR035D1P	13700			
40					GVAR040D1T	25000	55 Lit
50					GVAR050D1T	27200	90 Lit
60					GVAR060D1T	29300	100 Lit
75					GVAR075D1T	36000	120 Lit
100					GVAR100D1T	49300	180 Lit
150					GVAR150D1T	59200	195 Lit
200					GVAR200D1T	63500	210 Lit
300					GVAR300D1T	107000	300 Lit
400					GVAR400D1T	128400	350 Lit

TWO PHASE MODELS							
CURRENT RATING IN AMP	FLUSH BACK OF PANEL OPEN		Portable Table/Floor Mounting With Enclosure		Oil Cooled Without Oil		
	TYPE	PRICE	TYPE	PRICE	TYPE	PRICE	Approx. Oil Qty.
2	GVAR002D2F	3600	GVAR002D2P	4100			
4	GVAR004D2F	6900	GVAR004D2P	7800			
8	GVAR008D2F	8900	GVAR008D2P	9900			
10	GVAR010D2F	10800	GVAR010D2P	11900			
15	GVAR015D2F	15200	GVAR015D2P	16700			
20	GVAR020D2F	19700	GVAR020D2P	22000			
28	GVAR028D2F	26200	GVAR028D2P	29300			
35	GVAR035D2F	27400	GVAR035D2P	32700			
40					GVAR040D2T	42100	90 Lit
50					GVAR050D2T	45800	95 Lit
60					GVAR060D2T	48000	100 Lit
75					GVAR075D2T	74100	180 Lit
100					GVAR100D2T	83000	205 Lit
125					GVAR125D2T	95300	225 Lit
150					GVAR150D2T	103300	300 Lit
200					GVAR200D2T	124000	350 Lit
250					GVAR250D2T	170800	400 Lit
300					GVAR300D2T	250900	800 Lit
400					GVAR400D2T	290100	900 Lit
500					GVAR500D2T	335900	1000 Lit
600					GVAR600D2T	361900	1100 Lit

THREE PHASE MODELS							
CURRENT RATING IN AMP	FLUSH BACK OF PANEL OPEN		Portable Table/Floor Mounting With Enclosure		Oil Cooled Without Oil		
	TYPE	PRICE	TYPE	PRICE	TYPE	PRICE	Approx. Oil Qty.
2	GVAR002D3F	4400	GVAR002D3P	4800			
4	GVAR004D3F	9400	GVAR004D3P	10700			
8	GVAR008D3F	12100	GVAR008D3P	13500			
10	GVAR010D3F	14400	GVAR010D3P	16000			
15	GVAR015D3F	19400	GVAR015D3P	21400			
20	GVAR020D3F	25000	GVAR020D3P	27700			
28	GVAR028D3F	33200	GVAR028D3P	36400			
35	GVAR035D3F	34700	GVAR035D3P	37700			
40					GVAR040D3T	52800	115 Lit
50					GVAR050D3T	57400	125 Lit
60					GVAR060D3T	61400	130 Lit
75					GVAR075D3T	89000	245 Lit
100					GVAR100D3T	95800	270 Lit
150					GVAR150D3T	134800	330 Lit
200					GVAR200D3T	159100	385 Lit
300					GVAR300D3T	293200	895 Lit
400					GVAR400D3T	331300	970 Lit
500					GVAR500D3T	483200	1375 Lit
600					GVAR600D3T	521000	1475 Lit

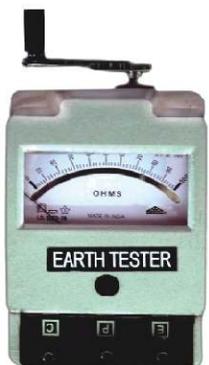
Note : Motorised models available

"INDOTECH" INSULATION TESTERS

GENERAL :

Insulation failure is one of the most common causes of electrical breakdown . Regular testing , however will reveal insulation weakness at an early stage & before serious damage can occur . The safe & efficient operation of electrical installation depends to a large extent on materials .

"INDOTECH" Insulation testers provide the most accurate & reliable means for the direct reading of insulation resistance of Electrical machinery.



GENERAL : "INDOTECH" INSULATION TESTERS Are available in hand Generator /Electronic Type . These are Housed in ABS/Metal/Wooden Cases Depending Upon the ranges & requirements of the customers.			
CASING		HOW TO SELECT THE MODEL / RANGE FOR VOLTAGE CODE	
Z - FOR METAL GENERATOR TYPE	500V - C	2000V - E	GIT # ****W,X,Y,or Z
W- FOR WODDEN GENERATOR TYPE	1000V - D	2500V - F	WRITE MEG OHM IN PLACE OF *****
		5000V - G	WRITE VOLTAGE CODE IN PLACE OF #
Note : 1. Standard Packing Discount not Available , 2. Prices for Higher Ranges , Motorised & Double Ranges on Request			

RATED VOLTAGE	RATED RESISTANCE	GENERATOR TYPE			NOTE :
		METAL CODE	BODY PRICE	WODDEN BODY CODE PRICE	
500V	100MΩ	GITC00100Z	3050/-	---	1. Prices for Other Ranges on Request 2. Carrying case availabb at extra cost
	200MΩ	GITC00200Z	3150/-	---	
	500MΩ	GITC02000Z	3250/-	---	
1000V	1000MΩ	GITC01000Z	3350/-	---	
	200MΩ	GITD00200Z	3250/-	---	
	500MΩ	GITD01000Z	3350/-	---	
	1000MΩ	GITD01000Z	3450/-	---	
2000V	2000MΩ	GITD02000Z	3550/-	---	
	2000MΩ	GITE02000Z	6150/-	GITE02000W On Req	
	5000MΩ	GITE05000Z	6850/-	GITE05000W On Req	
2500V	10000MΩ	GITE10000Z	6850/-	GITE05000W On Req	
	5000MΩ	GITF05000Z	6850/-	GITF05000W On Req	
	10000MΩ	GITF10000Z	7050/-	GITF05000W On Req	
5000V	5000MΩ	GITF05000Z	9250/-	GITG10000W On Req	
	10000MΩ	GITF10000Z	9650/-	GITG10000W On Req	
	20000MΩ	GITF20000Z	9950/-	GITG20000W On Req	

"INDOTECH" EARTH TESTERS

GENERAL :

Effective earthing is fundamental to electrical plant safety . The operation of protective equipment depends upon the earth electrode resistance at sub-station, factories & plants . . It is important to maintain resistance maintained within clearly defined limits .

"INDOTECH" Earth Tester is a direct reading instrument for measuring the resistance of earth electrodes for measuring the resistivity of the soil .

HOW TO SELECT THE MODEL / RANGE PRODUCT CODE FOR EARTH TESTER			EXAMPLE :
A - 2	E - 20	I - 200	FOR 3 ohm SINGLE RANGE / GETOXOYBZM FOR 50 /500 ohm DOUBLE RANGE / GET OKGYKZM FOR 10/100/100 ohm TRIPLE RANGE / GETDXHYLZM
B - 3	F - 30	J - 300	
C - 5	G - 50	K - 500	
D - 10	H - 100	L - 1000	
			GET*A*B*ZM

CODE	RANGE IN OHMS	PRICE		ACCESSORIES :
		3 TERMINAL METAL BODY	4 TERMINAL METAL BODY	
GET*A*B*ZM	ANY ONE SINGLE RANGE 3, 5 Ω	3350/-	3550/-	Test Kit for 3 Terminal Type Rs. 950/- Test Kit for 4 Terminal Type Rs. 1075/- Note : 1 Prices for Other Ranges on Request 2. Carrying case available at extra cost
	10, 20 Ω	3250/-	3450/-	
	100, 500, 1000 Ω	3050/-	3250/-	
GET*A*B*ZM	ANY ONE DOUBLE RANGE 3/30, 5/50, 10/100, 30/300, 50/500 or 100/1000	3950/-	4350/-	
GET*A*B*ZM	ANY ONE TRIPLE RANGE 2/10/100, 3/30/300, 5/50/500, or 10/100/1000	4650/-	4875/-	

"INDOTECH" ENERGY METERS (PANEL MOUNTED TYPE)

GENERAL :

We are one of the leading manufacturer of Electrical & Electronic Panel Meters & accessories for the last more than four decades . We have a team of skilled professionals who are experts in the line . The instruments are tested & gauged at every level of manufacturing to get the best performance .

MOUNTING : It is projection type which can be mounted on the wall . NO panel cut out is required .

"INDOTECH" has developed Digital kWh Meters required for the Residential , Commercial & Industrial purposes .

DESIGN :

"INDOTECH" kWh Meters are elegant in design in design with selective circuitory based on microcontroller technology .

DISPLAY : It is available in LCD type & Counter Type

ACCURACY : Class 1.0 as per IS 13779 - 1999



"INDOTECH " ENERGY METERS SINGLE PHASE MODELS

Models	COUNTER TYPE		LCD TYPE		
	RATING	Code	Price	Code	Price
5 - 30 A	IKWHC0530	525/-	IKWHL0530	675/-	
10 - 40 A	IKWHC1040	625/-	IKWHL1040	775/-	
PACKING	24 Pcs.		24 Pcs.		

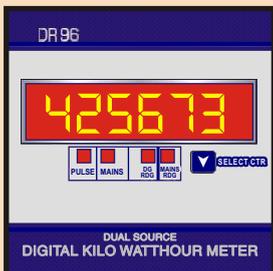
"INDOTECH " ENERGY METERS THREE PHASE MODELS

Models	COUNTER TYPE		LCD TYPE		
	RATING	Code	Price	Code	Price
10 - 60 A	IKWHC1060	1475/-	IKWHL1060	1775/-	
PACKING	12 Pcs.		12 Pcs.		

"INDOTECH" PANEL MOUNTED kWh & kVAh METERS

"INDOTECH" has designed Panel Mounted type kWh & kVAh Meters, with LED display .in Single Source suitable for Mains or Generator Supply & Dual Source suitable for Mains & Generator Supply .

The CT Ratio is programmable and the switch is provided under the dial of the meter. The multiple of 1000 is displayed by "K" and multiple of 1000000 is displayed by "M". The LED has six digits.



PRICE LIST

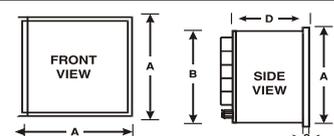
PRODUCT CODE	ITEM	PHASE	SOURCE	PRICE
D96KWHSS1	kWh Meter	SINGLE	SINGLE	Rs. 2325/-
D96KWHDS1	kWh Meter	SINGLE	DUAL	Rs. 3225/-
D96KWHSS3	kWh Meter	THREE	SINGLE	Rs. 2425/-
D96VAHSS1	kWh Meter	THREE	DUAL	Rs. 3325/-
D96VAHDS3	kVAh Meter	SINGLE	SINGLE	Rs. 2625/-
D96VAHDS1	kVAh Meter	SINGLE	DUAL	Rs. 3325/-
D96KWHSS3	kVAh Meter	THREE	SINGLE	Rs. 2725/-
D96KWHDS3	kVAh Meter	THREE	DUAL	Rs. 3425/-

STANDARD PACKING :24 PCS.

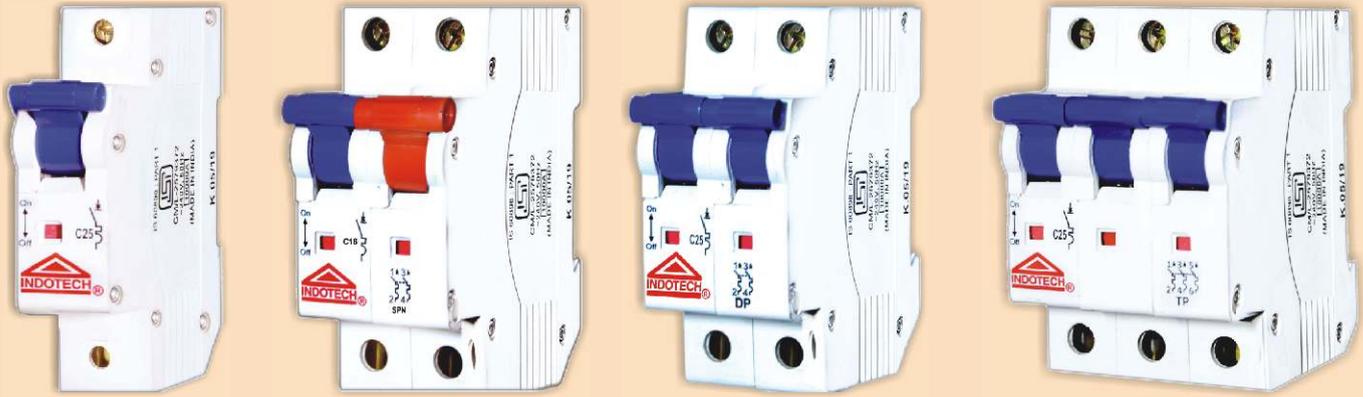
DIMENSIONS & MOUNTING ARRANGEMENTS

kWh & kVAh METERS				
MODEL	A	B	C	D
DR 96	96	90	5.5	45

All dimensions in mm.



"INDOTECH" MINIATURE CIRCUIT BREAKERS



"INDOTECH" Miniature Circuit Breakers

- * ISI Marked.
- * Smooth tripping.
- * Heavy duty contacts to ensure longer life span.
- * Low watt loss , thus energy saving.
- * Mould made of high quality fire retardant material.
- * Sufficient gap between the poles for better cooling of contacts.
- * ON/OFF indication for safety.

P. S. :-

- * SP : SINGLE POLE
- * SPN : SINGLE POLE WITH NEUTRAL
- * DP : DOUBLE POLE
- * TP : THREE POLE
- * TPN : THREE POLE WITH NEUTRAL
- * FP : FOUR POLE



"INDOTECH" MCB PRICE

RATING	SP		SPN		DP		TP		TPN		FP	
	Code	Price	Code	Price								
6A	IMCB0SP06	120/-	IMCBSPN06	315/-	IMCB0DP06	335/-	IMCB0TP06	495/-	IMCBTPN06	640/-	IMCB0FP06	795/-
10A	IMCB0SP10	120/-	IMCBSPN10	315/-	IMCB0DP10	335/-	IMCB0TP10	495/-	IMCBTPN10	640/-	IMCB0FP10	795/-
16A	IMCB0SP16	120/-	IMCBSPN16	315/-	IMCB0DP16	335/-	IMCB0TP16	495/-	IMCBTPN16	640/-	IMCB0FP16	795/-
20A	IMCB0SP20	120/-	IMCBSPN20	315/-	IMCB0DP20	335/-	IMCB0TP20	495/-	IMCBTPN20	640/-	IMCB0FP20	795/-
25A	IMCB0SP25	120/-	IMCBSPN25	315/-	IMCB0DP25	335/-	IMCB0TP25	495/-	IMCBTPN25	640/-	IMCB0FP25	795/-
32A	IMCB0SP32	120/-	IMCBSPN32	315/-	IMCB0DP32	335/-	IMCB0TP32	495/-	IMCBTPN32	640/-	IMCB0FP32	795/-
40A	IMCB0SP40	195/-	IMCBSPN40	435/-	IMCB0DP40	460/-	IMCB0TP40	690/-	IMCBTPN40	895/-	IMCB0FP40	920/-
63A	IMCB0SP63	245/-	IMCBSPN63	565/-	IMCB0DP63	590/-	IMCB0TP63	875/-	IMCBTPN63	1135/-	IMCB0FP63	1165/-
BOX PACKING	12 Pcs.		6 Pcs.		6 Pcs.		4 Pcs.		3 Pcs.		3 Pcs.	
STANDARD PACKING	120 Pcs.		60 Pcs.		60 Pcs.		30 Pcs.		40 Pcs.		40 Pcs.	

"INDOTECH" MINIATURE CIRCUIT BREAKERS (MINI TRIP)

"INDOTECH" Miniature Circuit Breakers

- * Smooth tripping.
- * Heavy duty contacts to ensure longer life span.
- * Low watt loss , thus energy saving.
- * Mould made of high quality fire retardant material.
- * Sufficient gap between the poles for better cooling of contacts.
- * ON/OFF indication for safety.



SCREW TYPE					MODULAR TYPE				
RATING	SP		DP		RATING	SP		DP	
	Code	Price	Code	Price		Code	Price	Code	Price
6A	IMCBSSP06	115/-	IMCBSDP06	315/-	6A	IMCBTSP06	115/-	IMCBTDP06	315/-
10A	IMCBSSP10	115/-	IMCBSDP10	315/-	10A	IMCBTSP10	115/-	IMCBTDP10	315/-
16A	IMCBSSP16	115/-	IMCBSDP16	315/-	16A	IMCBTSP16	115/-	IMCBTDP16	315/-
20A	IMCBSSP20	115/-	IMCBSDP20	315/-	20A	IMCBTSP20	115/-	IMCBTDP20	315/-
25A	IMCBSSP25	115/-	IMCBSDP25	315/-	25A	IMCBTSP25	115/-	IMCBTDP25	315/-
BOX PACKING	12 Pcs.		6 Pcs.		BOX PACKING	12 Pcs.		6 Pcs.	
STANDARD PACKING	120 Pcs.		60 Pcs.		STANDARD PACKING	120 Pcs.		60 Pcs.	

"INDOTECH" ISOLATORS & CHANGEOVER SWITCHES

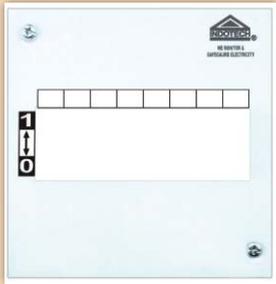


"INDOTECH" ISOLATORS & CHANGEOVERS SWITCHES

- * Heavy duty contacts to ensure better life span.
- * Low watt loss , thus energy saving.
- * Mould made of high quality fire retardant material.
- * Sufficient gap between the poles for better cooling of contacts.
- * ON/OFF indication for safety.

ISOLATORS							CHANGEOVERS SWITCHES				
RATING	DP		TP		FP		RATING	TWO WAY CENTRE OFF		FOUR WAY CENTRE OFF	
	Code	Price	Code	Price	Code	Price		Code	Price	Code	Price
32A	ISOLDP032	285/-	ISOLTP032	415/-	ISOLFP032	555/-	25A	ICOS2W025	495/-	ICOS4W025	975/-
40A	ISOLDP040	325/-	ISOLTP040	475/-	ISOLFP040	635/-	32A	ICOS2W032	495/-	ICOS4W032	975/-
63A	ISOLDP063	375/-	ISOLTP063	555/-	ISOLFP063	730/-	40A	ICOS2W040	535/-	ICOS4W040	1075/-
100A	ISOLDP100	425/-	ISOLTP100	645/-	ISOLFP100	825/-	63A	ICOS2W063	535/-	ICOS4W063	1125/-
BOX PACKING	6 Pcs.		4 Pcs.		3 Pcs.		BOX PACKING	6 Pcs.		3 Pcs.	
STANDARD PACKING	60 Pcs.		40 Pcs.		3 Pcs.		STANDARD PACKING	60 Pcs.		30 Pcs.	

"INDOTECH" MCB ENCLOSURES



MCB SPN SINGLE DOOR ENCLOSURES			
RATING	GOLD		
	Code	Price	STANDARD PACKING
2 WAY	IENSPNM02G	210/-	36 Pcs-
4 WAY	IENSPNS04G	360/-	36 Pcs-
6 WAY	IENSPNS06G	410/-	36 Pcs-
8 WAY	IENSPNS08G	480/-	24 Pcs-
10 WAY	IENSPNS10G	540/-	24 Pcs-
12 WAY	IENSPNS12G	590/-	18 Pcs-
16 WAY	IENSPNS16G	680/-	12 Pcs-



MCB SPN DOUBLE DOOR ENCLOSURES			
RATING	GOLD		
	Code	Price	STANDARD PACKING
4 WAY	IENSPND04G	650/-	24 Pcs-
6 WAY	IENSPND06G	760/-	24 Pcs-
8 WAY	IENSPND08G	870/-	24 Pcs-
10 WAY	IENSPND10G	980/-	18 Pcs-
12 WAY	IENSPND12G	1060/-	18 Pcs-
16 WAY	IENSPND16G	1260/-	12 Pcs-



MCB TPN DOUBLE DOOR ENCLOSURES			
RATING	GOLD		
	Code	Price	STANDARD PACKING
4 WAY	IENTPND04G	1550/-	12 Pcs-
4 WAY	IENTPND06G	1850/-	08 Pcs-
8 WAY	IENTPND08G	2110/-	06 Pcs-

"INDOTECH" DIGITAL MULTI METERS & CLAMP METERS



DIGITAL MULTIMETERS MODEL : IDMS010

DCV : 200mV-1000V	± 1.0%+3 Digits	Square wave o/p	: Yes
ACV : 200V-750V	± 1.5%+10 Digits	Power Supply	: 9V 6F22
DCA : 2000µA-10A	± 2.5%+5 Digits	Display Size	: 46 x 14mm
OHM : 200Ω-2000KΩ	± 1.0%+3 Digits	Maximum Display	: 1999
Transistor Test	: Yes	Product Size	: 126x70x28mm
Diode Test	: Yes	Product Net Weight	: 150g
Continuity buzzer	: Yes	(Including Battery)	
		Accessory	: Testing Leads

PRICE : Rs . 370/-

STANDARD PACKING : 40 UNITS



DIGITAL MULTIMETERS MODEL : IDMS020

DCV : 200mV-1000V	± 0.8%+2 Digits	Continuity Buzzer	: Yes
ACV : 200V-750V	± 1.0%+3 Digits	Power Supply	: 9V 6F22
DCA : 20µA-20A	± 2.5%+2 Digits	Maximum Display	: 1999
ACA : 20µA-20A	± 2.5%+3 Digits	Display Size	: 25x58mm
OHM : 200Ω-20MΩ	± 1.0%+2 Digit	Product Net Weight	: 340g
Transistor Test	: Yes	(Including Batteries)	
Diode Test	: Yes	Product Size	: 172x88x36mm
		Accessory	: Testing Leads

PRICE : Rs . 950/-

STANDARD PACKING : 20 UNITS

CLAMP METERS MODEL : IDCS050

DCV:200mV-1000V± 1.0%+2 Digits	Maximum Display: 1999
ACV:200V-750V± 1.5%+4 Digits	Display Size: 14x47mm
ACA:20A-1000A± 2.5%+5 Digits	Product Net Weight: 320g
OHM:200/20K/2Ω± 2.5%+2 Digits	(Including Batteries)
TEMP:0°C-750°C± 1.5%+2 Digits	Product Size : 230x90x37mm
Insulation Test: Yes	Max Clamp Opening: Ø 60mm
Data Hold: Yes	Accessories: Carrying case & Testing Leads
Power Supply : 9V 6F22	

PRICE : Rs . 950/-

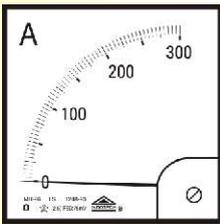
STANDARD PACKING : 20 UNITS

"INDOTECH" RAILWAY PRODUCTS

"INDOTECH" has designed some special products for Railways eg :



Ammeters & Voltmeters for Battery Chargers



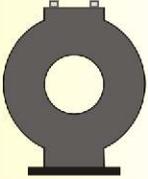
Ammeters & Voltmeters for Control Panels of A.C. Coaches.



Self Illuminating Voltmeters & Ammeters for Electric Locos.



Load Ammeter Electronic Type for Diesel Locos.



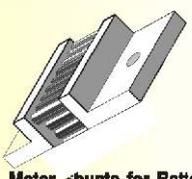
Various Type of Current Transformers for Railway Workshops



Load Ammeter Anaalag Type for Diesel Locos.



Digital Panel Meter for Control Panels of A.C. Coaches.



D.C. Meter shunts for Battery Chargers & A.C. Coaches
Load Ammeter Shunts for Electric & Diesel Locos

Our Selected Products are Approved by RCF & RDSO & are used by various Railways



SERVING THE NATION SINCE 1974



NSIC

MSME
सूक्ष्म, लघु एवं मध्यम उद्यम
MICRO, SMALL & MEDIUM ENTERPRISES



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