Yokogawa: Test & Measurement: Quality – Innovation – Foresight

PORTABLE DC AMMETER & VOLTMETER 2011, 2012

Models 2011 and 2012 ammeters & voltmeters are moving coil type instruments using a taut-band suspension system. The suspension system provides excellent reproducibility without friction, and strong resistance to shock impact. These precision instruments combine a magnetic circuit (sandwich mechanism) that blocks the effects of external magnetic fields, and a superior temperature compensation circuit.





Details

Specifications - Model 2011 31

Max. Scale Value	3/10/30/100 μΑ
Approximate Internal Rresistance and Consumed Power	5.1/18.3/7.7/2.5 KΩ
Operating Principle	Permanent moving coil
Class	JIS C 1102: 1997 Class 0.5 (Equivalent to class 1.0)
Operating Position	Horizontal
Scale Length	Approximately 135 mm (Deflection Angle: 85°)
Scale Divisions	100/150
Linemax	250V (Ammerters only)
Operating Temperature Range	0 ~ 46 °C
Operating Humidity Range	30 ~ 75% RH
Storage Temperature Range	-10 ~ 50 °C
Storage Humidity Range	25 ~ 80% RH
External Dimension	195 x 170 x 87 mm
External Weight	1.7 kg
Standard Accessories	Instruction Manual (1) Shunt cable (2011 41, 2012 00 only)
Optional Accessories	2291 01 Carrying case for 2011 2292 01 Carrying case for 2012
Scale	2011 41 50 mV instrument and 2011 42 3 V instrument The scale for the 50mV instrument has 100 and 150 divisions. A 50 mV current transformer may be combined with any rated current instrument to read measurements through a simple conversion process. DC scales (single scale or dual scale) are also available by special order.

Features

- Taut-band suspension system eliminates friction and provides strong resistance to shock impact.
- Stable performance ensures that changes over time are negligible.

- Quick response and easy-to-read scale
- Superior temperature compensation circuit reduces external temperature effects.
- Magnetic circuit (sandwich mechanism) reduces the effects of external magnetic fields.

Specifications - Model 2011 32

Max. Scale Value	10/30/100/300 μΑ
Approximate Internal Rresistance and Consumed Power	6.8/6.8/2.5/0.88 KΩ
Operating Principle	Permanent moving coil
Class	JIS C 1102: 1997 Class 0.5 (Equivalent to class 1.0)
Operating Position	Horizontal
Scale Length	Approximately 135 mm (Deflection Angle: 85°)
Scale Divisions	100/150
Linemax	250V (Ammerters only)
Operating Temperature Range	0 ~ 46 °C
Operating Humidity Range	30 ~ 75% RH
Storage Temperature Range	-10 ~ 50 °C
Storage Humidity Range	25 ~ 80% RH
External Dimension	195 x 170 x 87 mm
External Weight	1.7 kg
Standard Accessories	Instruction Manual (1) Shunt cable (2011 41, 2012 00 only)
Optional Accessories	2291 01 Carrying case for 2011 2292 01 Carrying case for 2012
Scale	• 2011 41 50 mV instrument and 2011 42 3 V instrument The scale for the 50mV instrument has 100 and 150 divisions. A 50 mV current transformer may be combined with any rated current instrument to read measurements through a simple conversion process. DC scales (single scale or dual scale) are also available by special order.

Features

- Taut-band suspension system eliminates friction and provides strong resistance to shock impact.
- Stable performance ensures that changes over time are negligible.
- Quick response and easy-to-read scale
- Superior temperature compensation circuit reduces external temperature effects.
- Magnetic circuit (sandwich mechanism) reduces the effects of external magnetic fields.

Max. Scale Value	0.1/0.3/1/3 mA
Approximate Internal Rresistance and Consumed Power	750/750/278/97.5 Ω
Operating Principle	Permanent moving coil
Class	JIS C 1102: 1997 Class 0.5 (Equivalent to class 1.0)
Operating Position	Horizontal
Scale Length	Approximately 135 mm (Deflection Angle: 85°)
Scale Divisions	100/150
Linemax	250V (Ammerters only)
Operating Temperature Range	0 ~ 46 °C
Operating Humidity Range	30 ~ 75% RH
Storage Temperature Range	-10 ~ 50 °C

Storage Humidity Range	25 ~ 80% RH
External Dimension	195 x 170 x 87 mm
External Weight	1.7 kg
Standard Accessories	Instruction Manual (1) Shunt cable (2011 41, 2012 00 only)
Optional Accessories	2291 01 Carrying case for 2011 2292 01 Carrying case for 2012
Scale	2011 41 50 mV instrument and 2011 42 3 V instrument The scale for the 50mV instrument has 100 and 150 divisions. A 50 mV current transformer may be combined with any rated current instrument to read measurements through a simple conversion process. DC scales (single scale or dual scale) are also available by special order.

- · Taut-band suspension system eliminates friction and provides strong resistance to shock impact.
- Stable performance ensures that changes over time are negligible.
- Quick response and easy-to-read scale
- Superior temperature compensation circuit reduces external temperature effects.
- Magnetic circuit (sandwich mechanism) reduces the effects of external magnetic fields.

Specifications - Model 2011 34

Max. Scale Value	1/3/10/30 mA
Approximate Internal Rresistance and Consumed Power	$23/14/4.7/1.6 \Omega$
Operating Principle	Permanent moving coil
Class	JIS C 1102: 1997 Class 0.5 (Equivalent to class 1.0)
Operating Position	Horizontal
Scale Length	Approximately 135 mm (Deflection Angle: 85°)
Scale Divisions	100/150
Linemax	250V (Ammerters only)
Operating Temperature Range	0 ~ 46 °C
Operating Humidity Range	30 ~ 75% RH
Storage Temperature Range	-10 ~ 50 °C
Storage Humidity Range	25 ~ 80% RH
External Dimension	195 x 170 x 87 mm
External Weight	1.7 kg
Standard Accessories	Instruction Manual (1) Shunt cable (2011 41, 2012 00 only)
Optional Accessories	2291 01 Carrying case for 2011 2292 01 Carrying case for 2012
Scale	• 2011 41 50 mV instrument and 2011 42 3 V instrument The scale for the 50mV instrument has 100 and 150 divisions. A 50 mV current transformer may be combined with any rated current instrument to read measurements through a simple conversion process. DC scales (single scale or dual scale) are also available by special order.

Features

- Taut-band suspension system eliminates friction and provides strong resistance to shock impact.
- Stable performance ensures that changes over time are negligible.
- Quick response and easy-to-read scale
- Superior temperature compensation circuit reduces external temperature effects.
- Magnetic circuit (sandwich mechanism) reduces the effects of external magnetic fields.

Specifications - Model 2011 35

Max. Scale Value	10/30/100/300 mA
Approximate Internal Rresistance and Consumed Power	50 mV
Operating Principle	Permanent moving coil
Class	JIS C 1102: 1997 Class 0.5 (Equivalent to class 1.0)
Operating Position	Horizontal
Scale Length	Approximately 135 mm (Deflection Angle: 85°)
Scale Divisions	100/150
Linemax	250V (Ammerters only)
Operating Temperature Range	0 ~ 46 °C
Operating Humidity Range	30 ~ 75% RH
Storage Temperature Range	-10 ~ 50 °C
Storage Humidity Range	25 ~ 80% RH
External Dimension	195 x 170 x 87 mm
External Weight	1.7 kg
Standard Accessories	Instruction Manual (1) Shunt cable (2011 41, 2012 00 only)
Optional Accessories	2291 01 Carrying case for 2011 2292 01 Carrying case for 2012
Scale	• 2011 41 50 mV instrument and 2011 42 3 V instrument The scale for the 50mV instrument has 100 and 150 divisions. A 50 mV current transformer may be combined with any rated current instrument to read measurements through a simple conversion process. DC scales (single scale or dual scale) are also available by special order.

Features

- Taut-band suspension system eliminates friction and provides strong resistance to shock impact.
- Stable performance ensures that changes over time are negligible.
- Quick response and easy-to-read scale
- Superior temperature compensation circuit reduces external temperature effects.
 Magnetic circuit (sandwich mechanism) reduces the effects of external magnetic fields.

Max. Scale Value	0.1/0.3/1/3 A
Approximate Internal Rresistance and Consumed Power	50 mV
Operating Principle	Permanent moving coil
Class	JIS C 1102 : 1997 Class 0.5 (Equivalent to class 1.0)
Operating Position	Horizontal
Scale Length	Approximately 135 mm (Deflection Angle: 85°)
Scale Divisions	100/150
Linemax	250V (Ammerters only)
Operating Temperature Range	0 ~ 46 °C
Operating Humidity Range	30 ~ 75% RH
Storage Temperature Range	-10 ~ 50 °C
Storage Humidity Range	25 ~ 80% RH
External Dimension	195 x 170 x 87 mm
External Weight	1.7 kg

Standard Accessories	Instruction Manual (1) Shunt cable (2011 41, 2012 00 only)
Optional Accessories	2291 01 Carrying case for 2011 2292 01 Carrying case for 2012
Scale	2011 41 50 mV instrument and 2011 42 3 V instrument The scale for the 50mV instrument has 100 and 150 divisions. A 50 mV current transformer may be combined with any rated current instrument to read measurements through a simple conversion process. DC scales (single scale or dual scale) are also available by special order.

- Taut-band suspension system eliminates friction and provides strong resistance to shock impact.
- Stable performance ensures that changes over time are negligible.
- Quick response and easy-to-read scale
- Superior temperature compensation circuit reduces external temperature effects.
- Magnetic circuit (sandwich mechanism) reduces the effects of external magnetic fields.

Specifications - Model 2011 37

Max. Scale Value	1/3/10/30 A
Approximate Internal Rresistance and Consumed Power	50 mV
Operating Principle	Permanent moving coil
Class	JIS C 1102: 1997 Class 0.5 (Equivalent to class 1.0)
Operating Position	Horizontal
Scale Length	Approximately 135 mm (Deflection Angle: 85°)
Scale Divisions	100/150
Linemax	250V (Ammerters only)
Operating Temperature Range	0 ~ 46 °C
Operating Humidity Range	30 ~ 75% RH
Storage Temperature Range	-10 ~ 50 °C
Storage Humidity Range	25 ~ 80% RH
External Dimension	195 x 170 x 87 mm
External Weight	1.7 kg
Standard Accessories	Instruction Manual (1) Shunt cable (2011 41, 2012 00 only)
Optional Accessories	2291 01 Carrying case for 2011 2292 01 Carrying case for 2012
Scale	• 2011 41 50 mV instrument and 2011 42 3 V instrument The scale for the 50mV instrument has 100 and 150 divisions. A 50 mV current transformer may be combined with any rated current instrument to read measurements through a simple conversion process. DC scales (single scale or dual scale) are also available by special order.

Features

- Taut-band suspension system eliminates friction and provides strong resistance to shock impact.
- Stable performance ensures that changes over time are negligible.
- · Quick response and easy-to-read scale
- Superior temperature compensation circuit reduces external temperature effects.
- Magnetic circuit (sandwich mechanism) reduces the effects of external magnetic fields.

Max. Scale Value	0.3/1/3/10 V

Approximate Internal Rresistance and Consumed Power	1mA (1000 D/V)
Operating Principle	Permanent moving coil
Class	JIS C 1102 : 1997 Class 0.5 (Equivalent to class 1.0)
Operating Position	Horizontal
Scale Length	Approximately 135 mm (Deflection Angle: 85°)
Scale Divisions	100/150
Linemax	250V (Ammerters only)
Operating Temperature Range	0 ~ 46 °C
Operating Humidity Range	30 ~ 75% RH
Storage Temperature Range	-10 ~ 50 °C
Storage Humidity Range	25 ~ 80% RH
External Dimension	195 x 170 x 87 mm
External Weight	1.7 kg
Standard Accessories	Instruction Manual (1) Shunt cable (2011 41, 2012 00 only)
Optional Accessories	2291 01 Carrying case for 2011 2292 01 Carrying case for 2012
Scale	• 2011 41 50 mV instrument and 2011 42 3 V instrument The scale for the 50mV instrument has 100 and 150 divisions. A 50 mV current transformer may be combined with any rated current instrument to read measurements through a simple conversion process. DC scales (single scale or dual scale) are also available by special order.

- Taut-band suspension system eliminates friction and provides strong resistance to shock impact.
 Stable performance ensures that changes over time are negligible.
 Quick response and easy-to-read scale
 Superior temperature compensation circuit reduces external temperature effects.

- Magnetic circuit (sandwich mechanism) reduces the effects of external magnetic fields.

Max. Scale Value	3/10/30/100 V
Approximate Internal Rresistance and Consumed Power	1mA (1000 D/V)
Operating Principle	Permanent moving coil
Class	JIS C 1102: 1997 Class 0.5 (Equivalent to class 1.0)
Operating Position	Horizontal
Scale Length	Approximately 135 mm (Deflection Angle: 85°)
Scale Divisions	100/150
Linemax	250V (Ammerters only)
Operating Temperature Range	0 ~ 46 °C
Operating Humidity Range	30 ~ 75% RH
Storage Temperature Range	-10 ~ 50 °C
Storage Humidity Range	25 ~ 80% RH
External Dimension	195 x 170 x 87 mm
External Weight	1.7 kg
Standard Accessories	Instruction Manual (1) Shunt cable (2011 41, 2012 00 only)
Optional Accessories	2291 01 Carrying case for 2011 2292 01 Carrying case for 2012

• 2011 41 50 mV instrument and 2011 42 3 V instrument The scale for the 50mV instrument has 100 and 150 divisions. A 50 mV current transformer may be combined with any rated current instrument to read measurements through a simple conversion process. DC scales (single scale or dual scale) are also available by special order.

Features

- Taut-band suspension system eliminates friction and provides strong resistance to shock impact.
- Stable performance ensures that changes over time are negligible.
- Quick response and easy-to-read scale
- Superior temperature compensation circuit reduces external temperature effects.
- Magnetic circuit (sandwich mechanism) reduces the effects of external magnetic fields.

Specifications - Model 2011 40

Max. Scale Value	30/100/300/1000 V
Approximate Internal Rresistance and Consumed Power	1mA (1000 D/V)
Operating Principle	Permanent moving coil
Class	JIS C 1102 : 1997 Class 0.5 (Equivalent to class 1.0)
Operating Position	Horizontal
Scale Length	Approximately 135 mm (Deflection Angle: 85°)
Scale Divisions	100/150
Linemax	250V (Ammerters only)
Operating Temperature Range	0 ~ 46 °C
Operating Humidity Range	30 ~ 75% RH
Storage Temperature Range	-10 ~ 50 °C
Storage Humidity Range	25 ~ 80% RH
External Dimension	195 x 170 x 87 mm
External Weight	1.7 kg
Standard Accessories	Instruction Manual (1) Shunt cable (2011 41, 2012 00 only)
Optional Accessories	2291 01 Carrying case for 2011 2292 01 Carrying case for 2012
Scale	• 2011 41 50 mV instrument and 2011 42 3 V instrument The scale for the 50mV instrument has 100 and 150 divisions. A 50 mV current transformer may be combined with any rated current instrument to read measurements through a simple conversion process. DC scales (single scale or dual scale) are also available by special order.

Features

- · Taut-band suspension system eliminates friction and provides strong resistance to shock impact.
- Stable performance ensures that changes over time are negligible.
- · Quick response and easy-to-read scale
- Superior temperature compensation circuit reduces external temperature effects.
- Magnetic circuit (sandwich mechanism) reduces the effects of external magnetic fields.

Max. Scale Value	(50mV)
Approximate Internal Rresistance and Consumed Power	93 Ω
Operating Principle	Permanent moving coil
Class	JIS C 1102: 1997 Class 0.5 (Equivalent to class 1.0)

Operating Position	Horizontal
Scale Length	Approximately 135 mm (Deflection Angle: 85°)
Scale Divisions	100/150
Linemax	250V (Ammerters only)
Operating Temperature Range	0 ~ 46 °C
Operating Humidity Range	30 ~ 75% RH
Storage Temperature Range	-10 ~ 50 °C
Storage Humidity Range	25 ~ 80% RH
External Dimension	195 x 170 x 87 mm
External Weight	1.7 kg
Standard Accessories	Instruction Manual (1) Shunt cable (2011 41, 2012 00 only)
Optional Accessories	2291 01 Carrying case for 2011 2292 01 Carrying case for 2012
Scale	2011 41 50 mV instrument and 2011 42 3 V instrument The scale for the 50mV instrument has 100 and 150 divisions. A 50 mV current transformer may be combined with any rated current instrument to read measurements through a simple conversion process. DC scales (single scale or dual scale) are also available by special order.

- Taut-band suspension system eliminates friction and provides strong resistance to shock impact.
- Stable performance ensures that changes over time are negligible.
- Quick response and easy-to-read scale
- Superior temperature compensation circuit reduces external temperature effects.
 Magnetic circuit (sandwich mechanism) reduces the effects of external magnetic fields.

Max. Scale Value	(3V)
Approximate Internal Rresistance and Consumed Power	ImA (1000 Ω/V)
Operating Principle	Permanent moving coil
Class	JIS C 1102 : 1997 Class 0.5 (Equivalent to class 1.0)
Operating Position	Horizontal
Scale Length	Approximately 135 mm (Deflection Angle: 85°)
Scale Divisions	100/150
Linemax	250V (Ammerters only)
Operating Temperature Range	0 ~ 46 °C
Operating Humidity Range	30 ~ 75% RH
Storage Temperature Range	-10 ~ 50 °C
Storage Humidity Range	25 ~ 80% RH
External Dimension	195 x 170 x 87 mm
External Weight	1.7 kg
Standard Accessories	Instruction Manual (1) Shunt cable (2011 41, 2012 00 only)
Optional Accessories	2291 01 Carrying case for 2011 2292 01 Carrying case for 2012
Scale	• 2011 41 50 mV instrument and 2011 42 3 V instrument The scale for the 50mV instrument has 100 and 150 divisions. A 50 mV current transformer may be combined with any rated current instrument to read measurements through a simple conversion process. DC scales (single scale or dual scale) are also available by special order.

- Taut-band suspension system eliminates friction and provides strong resistance to shock impact.
- Stable performance ensures that changes over time are negligible.
- Quick response and easy-to-read scale
- Superior temperature compensation circuit reduces external temperature effects.
- Magnetic circuit (sandwich mechanism) reduces the effects of external magnetic fields.

Specifications - Model 2012 00

3/10/30/100/300/1000V 1/3/10/30/100/300mA 1/3/10/30A/50mV Permanent moving coil JIS C 1102 : 1997 Class 0.5 (Equivalent to class 1.0) Horizontal Approximately 135 mm (Deflection Angle: 85°) 100/150 250V (Ammerters only)
1/3/10/30A/50mV Permanent moving coil JIS C 1102: 1997 Class 0.5 (Equivalent to class 1.0) Horizontal Approximately 135 mm (Deflection Angle: 85°) 100/150
Permanent moving coil JIS C 1102: 1997 Class 0.5 (Equivalent to class 1.0) Horizontal Approximately 135 mm (Deflection Angle: 85°) 100/150
JIS C 1102 : 1997 Class 0.5 (Equivalent to class 1.0) Horizontal Approximately 135 mm (Deflection Angle: 85°) 100/150
Horizontal Approximately 135 mm (Deflection Angle: 85°) 100/150
Approximately 135 mm (Deflection Angle: 85°) 100/150
100/150
250V (Ammerters only)
0 ~ 46 °C
30 ~ 75% RH
50 15/0 KH
-10 ~ 50 °C
25 ~ 80% RH
23 00% INI
260 x 180 x 115 mm
200 X 100 X 113 IIIIII
2.8 kg
Instruction Manual (1)
Shunt cable (2011 41, 2012 00 only)
2291 01 Carrying case for 2011
2292 01 Carrying case for 2012
• 2011 41 50 mV instrument and 2011 42 3 V instrument The scale for the 50mV instrument has 100 and 150 divisions. A 50 mV current transformer may be combined with any rated current instrument to read measurements through a simple conversion process. DC scales (single scale or dual scale) are also available by special order.
3 - 2 2 1 S

Approximate Internal Resistance and Consumed Power

Voltage measurement range Approximately			
1mA (100W/V)			
Current measurement range			
<range></range>	<voltage drop=""></voltage>	<range></range>	<voltage drop=""></voltage>
1 mA	24 mV	1 A	53 mV
3 mA	41 mV	3 A	56 mV
10 mA	47 mV	10 A	75 mV
30 mA	49 mV	30 A	100 mV
100 mA	50 mV	50 mV	59Ω
300 mA	51 mV		

Features

• Taut-band suspension system eliminates friction and provides strong resistance to shock impact.

- Stable performance ensures that changes over time are negligible.
- · Quick response and easy-to-read scale
- Superior temperature compensation circuit reduces external temperature effects.
- Magnetic circuit (sandwich mechanism) reduces the effects of external magnetic fields.

Model Numbers

Model	Description
2011 38	0.3/1/3/10 V, 1mA (1000 D/V), 195 x 170 x 87 mm, 1.7 kg
2011 36	0.1/0.3/1/3 A, 50 mV, 195 x 170 x 87 mm, 1.7 kg
2011 33	0.1/0.3/1/3 mA, 750/750/278/97.5 ?, 195 x 170 x 87 mm, 1.7 kg
2011 37	1/3/10/30 A, 50 mV, 195 x 170 x 87 mm, 1.7 kg
2011 40	30/100/300/1000 V, 1mA (1000 D/V), 195 x 170 x 87 mm, 1.7 kg
2011 39	3/10/30/100 V, 1mA (1000 D/V), 195 x 170 x 87 mm, 1.7 kg
2011 32	10/30/100/300 □A, 6.8/6.8/2.5/0.88 K?, 195 x 170 x 87 mm, 1.7 kg
2011 31	3/10/30/100 □A, 5.1/18.3/7.7/2.5 K?, 195 x 170 x 87 mm, 1.7 kg
2011 41	(50mV), 93 ?, 195 x 170 x 87 mm, 1.7 kg
2012 00	3/10/30/100/300/1000V 1/3/10/30/100/300mA 1/3/10/30A/50mV, N/A, 260 x 180 x 115 mm, 2.8 kg
2011 42	(3V), 1mA (1000 ?/V), 195 x 170 x 87 mm, 1.7 kg
2011 35	10/30/100/300 mA, 50 mV, 195 x 170 x 87 mm, 1.7 kg
2011 34	1/3/10/30 mA, 23/14/4.7/1.6 ?, 195 x 170 x 87 mm, 1.7 kg

Specifications

Name	Description	File Type	
Selection Guide		73 KB	<u>Download</u>
List of JIS Mark Indications		₹ 54 KB	Download

© Copyright 2008 - 2011 Yokogawa Electric Corporation, All rights reserved

Portable Instrument (Ammeter and Voltmeter) Selection Guide

tegory	Class	Model				Measu	ement ranç	je (maxir	num scale v	ralve)			
				10 <i>μ</i> A	100)μA 1	mA 10i	nA 1	00mA	1A -	10A	100A	
DC	Class 0.5	2011 DC A	4 ranges	2011 2011 41 (50mV)	2011 32	2011	33 2011 3	2011 4	35 2011	36 2011 :) 7		
	Class 1.0 (2011 31)	2012 DC AV	17 ranges	2012 ○(50mV)					2012	2012 00			KEEK
\	(2011 32 <i>)</i>	2011 DC V	4 ranges		Value 12		2011 38		2011 39		2011 4)	
	"			0.1V			1V		10V	1	00V .		1000\
				10mA	50700073		0mA		1A		0A		100A
			2 ranges		\$ \$ 22.23 \$	2013 01)13 02 2013 03	2013 04		2013 07)13 08 2013		2: Cc cu
		2013 AC A	4 ranges			2013 10	201:		1	2013 13	1	013 14	
AC neters nd neters	Class 0.5		400Hz							2013 24	1	013 25	
		2014 AC AV	13 ranges						2014 00		2014 00		
		2013	2 ranges						2013:15	2013 16	2013 2013 21 (150V 317	18 ₎ 2013 19	
		AC V	z ranges						The state of the s		+	13 28	
			400Hz	0.1V		·	· IV		10V		3 26 2013 2	7	1000\
				1mA)mA		00mA		1A		10000
igh uency ieters nd ieters,	Class 1.0	2016 (thermocouple type)				\$227.460	2016 01		20	6 03	The state of the s		
dible uency	Class 0.5	201 <i>7</i>								2016 04			
neters	0.0	(rectifier type)		0.1V			V		10V	201 .	7 30 00V	àd <u> </u>	1000V
				10 <i>μ</i> A	100	μ A 1:	mA 10n	nA 16	00mA	1A 1	0A	100A	
OC teters	Class	2051 DC A				2051 01	2051 02	20	51 03	2051 04		. 5	
nd neters	1.0	2051 DC V				7.7001.058.6820			20	51 06	1		
				0.1V			V		10V	10	VOOV		1000V
AC .	<u> </u>	2052		0.1mA	<u> </u>		mA 52 01		0mA 2052 0 :	F-1-4-049	OmA		1A
neters and neters	Class 1.5	AC A AC V (rectifier type)						2052 02 2052 05			52 04 2052 07		

10mA

100mA

1 A

10A

100A

List of JIS Mark Indications

Product	Мо	del	Specification	ons	JIS mark	Product	Мо	del	Specifications		JIS mark	
		31	3/10/30/100	μΑ	None	None		31	45~65Hz 120/240V	'	None	1
		32	10/30/100/300	μΑ	I None			32	20~100Hz 120/240V		1 10110	
DC ammeter		33	0.1/0.3/1/3	mA		Needle-indicator	2038	03	100~300Hz 120/240V			١
(4 ranges)		34	1/3/10/30	mA		frequency meter	2030	04	300~500Hz 120/240V		None	
		35	10/30/100/300	mA	€)			11	45~55Hz 120/240V	'	None	
	2044	36	0.1/0.3/1/3	Α				12	55~65Hz 120/240V			
	2011	37	1/3/10/30	Α				01	0.2/1A 120V	,		1
nc i		38	0.3/1/3/10	V		Power factor meter	2039	02	1/5A 120V	'	None	
DC voltmeter		39	3/10/30/100	V	(%)			03	5/25A 120V	,		
(4 ranges)		40	30/100/300/1000	V				01	0.2/1A 120/240V	,		1
DC ammeter		41	(50	mV)	(x)	Single-phase wattmeter		02	1/5A 120/240V	,	(
DC voltmeter		42	(3	V)	(x)			03	5/25A 120/240V	'		
DC ammeter and voltmeter	2012	00	17 ranges		(x)		.	11	0.2/1A 120/240V Power fa	ictor: 0.2		1
		01	20/100	mA			2041	12	1/5A 120/240V Power fa	ıctor: 0.2		
		02	50/250	mA	1 l	Single-phase low power		13	5/25A 120/240V Power fa	ıctor: 0.2	None	
		03	100/500	mA		factor wattmeter		21	0.2/1A 30/60V Power fa	ıctor: 0.2		ı
		04	0.2/1	A				22	1/5A 30/60V Power fa	ıctor: 0.2		1
AC ammeter		05	0.5/2.5	A	69			01	0.2/1A 120/240V	,		1
(2 ranges)		06	1/5	Α		Three-phase wattmeter	2042	02	1/5A 120/240V	,	(c)	
		07	2/10	Α		'		03	5/25A 120/240V	,		
		08	5/25	A	1			01	30/100/300/1000/3000 P	μA		1
		09	10/50	A	1		,	02	0.3/1/3/10/30 m	nA	٠	
		10	20/50/100/200	mA				03	10/30/100/300/1000 m	nA	(
		11	0.1/0.2/0.5/1	Α	1			04		A		
AC ammeter		12	0.5/1/2/5	Α	(3)			11		nA		\dashv
(4 ranges)		13	2/5/10/20	A	"	Miniature DC ammeter		12		nA		۱
	2013	14	10/20/50/100	Α	1			13		nA	٠.	1
	-	15	15/30				2051	14		nA	(\mathcal{E})	
		16	30/75		1			15		\overline{A}		1
AC voltmeter		17	75/150	_ _	(x)			16		\overline{A}		1
(2 ranges)	1	18	150/300		- "		1	05		$\frac{1}{\sqrt{1-\frac{1}{2}}}$		1
	ľ	19	300/750	V	1			06		\overline{v}		l
AC ammeter	1	20		A)				~~~		\overline{v}	٠	١
AC voltmeter	1	21		50V)	(x)	Miniature DC voltmeter		18		v	(\mathcal{E})	1
AC volimeter	1	22	500 (500AT)	A	†			19		v		
Ac diffinerer	1	23	0.5/1/2/5					20	=1.0/6/10/00/100	v		
AC voltmeter		24	2/5/10/20	Α	(x)			01		nA		1
(4 ranges) (for 400 Hz)		25	10/20/50/100	Α Α	"			02		nA		
AC voltmeter	1	26	75/150	- 2		Miniature AC ammeter		03		nA	(F)	
(2 ranges) (for 400 Hz)		27	150/300		(x)		2052	04		nA		1
AC ammeter and voltmeter	2014	00	13 ranges	v	(x)		-552	05		v		1
Ac unimerer and voimerer	2014	-		mΛ	+ · · · ·	Miniature AC voltmeter		06	5, 115, 75	$\frac{}{v}$	€)	
High-frequency	1	01	5/10/20/50	mA mA	- None	Miniciple AC Volinleier		07		$\frac{v}{v}$		
AC ammeter	2016	02	20/50/100/200	mA mA	None		 	01		Ā		\dashv
Ulah farmana AC ada atau	-	03	100/200/500/1000	mA	Nicos	Miniature AC ammeter	2053	02		$\frac{7}{A}$	(x)	
High-frequency AC voltmeter	004=	04	15/30/75/150	- V	None	Millialore AC ammerer	2003	02		^ A	ری	
Audio-frequency voltmeter	2017	30	30/75/150/300	V	None		<u> </u>	03	3/10/23	73	L	┙