Yokogawa: Test & Measurement: Quality – Innovation – Foresight

PORTABLE POWER FACTOR METERS 2039

Model 2039 is a revolutionary series of portable wattmeters in which a power factor is used to operate the DC indicator. This is done using a transducer which provides a DC current proportionate to the voltage-current phase by means of a circuit. Model 2039 can be used in single-phase and balanced three-phase circuits. The electronic transducer, combined with a high sensitivity moving coil type indicator based on YOKOGAWA's proprietary taut-band suspension system, provides a level of performance not possible with conventional power factor meters.



Details

Specifications - Model 2039 01

Rated Current	0.2/1 A				
Rated Voltage	120V (Used between 60 and 300 V.)				
Operating Principle	Rectifier type				
Class	JIS C 1102 : 1997 Class 3.0				
Operating Position	Horizontal				
Rated Frequency	45 ~ 65 Hz				
Scale Length	Approximately 135 mm (Deflection Angle: 85°)				
Scale	Lead 0-0.3 to 1.0 to 0.3-0 lag (with phase angle scale)				
Effective Measurement Range	Lead 0.5 to 1.0 to 0.5 lag				
Approx. Consumed Power Voltage Circuit (120 V)	0.14 VA				
Approx. Current Circuit (5 A)	2.4 VA				
Operating Temperature Range	0 ~ 40 °C				
Operating Humidity Range	30 ~ 75% RH				
Storage Temperature Range	-10 ~ 50 °C				
Storage Humidity Range	25 ~ 80% RH				
Approx. External Dimension	260 x 180 x 115 mm				
Approx. External Weight	2.9 kg				
Optional Accessories	2292 01 Carrying case				

Features

- For both single-phase and three-phase (balanced circuit).
- Excellent current characteristic: 20 ~ 200% of rated current (short time period)
- Wide range of applicable voltages: 60 ~ 300 V AC
- Phase angle scale included
- Taut-band suspension system eliminates friction and provides strong resistance to shock impact.

Specifications - Model 2039 02

Rated Current	1/5A				
Rated Voltage	120V (Used between 60 and 300 V.)				

Operating Principle	Rectifier type					
Class	JIS C 1102 : 1997 Class 3.0					
Operating Position	Horizontal					
Rated Frequency	45 ~ 65 Hz					
Scale Length	Approximately 135 mm (Deflection Angle: 85°)					
Scale	Lead 0-0.3 to 1.0 to 0.3-0 lag (with phase angle scale)					
Effective Measurement Range	Lead 0.5 to 1.0 to 0.5 lag					
Approx. Consumed Power Voltage Circuit (120 V)	0.14 VA					
Approx. Current Circuit (5 A) 2.4 VA						
Operating Temperature Range	0 ~ 40 °C					
Operating Humidity Range	30 ~ 75% RH					
Storage Temperature Range	-10 ~ 50 °C					
Storage Humidity Range	25 ~ 80% RH					
Approx. External Dimension	260 x 180 x 115 mm					
Approx. External Weight	2.9 kg					
Optional Accessories	2292 01 Carrying case					

Features

- For both single-phase and three-phase (balanced circuit).
 Excellent current characteristic: 20 ~ 200% of rated current (short time period)
- Wide range of applicable voltages: 60 ~ 300 V AC
- Phase angle scale included
- Taut-band suspension system eliminates friction and provides strong resistance to shock impact.

Specifications - Model 2039 03

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Rated Current	5/25A					
Rated Voltage	120V (Used between 60 and 300 V.)					
Operating Principle	Rectifier type					
Class	JIS C 1102 : 1997 Class 3.0					
Operating Position	Horizontal					
Rated Frequency	45 ~ 65 Hz					
Scale Length	Approximately 135 mm (Deflection Angle: 85°)					
Scale	Lead 0-0.3 to 1.0 to 0.3-0 lag (with phase angle scale)					
Effective Measurement Range	Lead 0.5 to 1.0 to 0.5 lag					
Approx. Consumed Power Voltage Circuit (120 V	7) 0.14 VA					
Approx. Current Circuit (5 A)	2.4 VA					
Operating Temperature Range	0 ~ 40 °C					
Operating Humidity Range	30 ~ 75% RH					
Storage Temperature Range	-10 ~ 50 °C					
Storage Humidity Range	25 ~ 80% RH					
Approx. External Dimension	260 x 180 x 115 mm					
Approx. External Weight	2.9 kg					
Optional Accessories	2292 01 Carrying case					

Features

- For both single-phase and three-phase (balanced circuit).
- Excellent current characteristic: 20 ~ 200% of rated current (short time period)
- Wide range of applicable voltages: 60 ~ 300 V AC
- Phase angle scale included
- Taut-band suspension system eliminates friction and provides strong resistance to shock impact.

Model Numbers

Model	Description
2039 03	$5/25$ A, $45 \sim 65$ Hz, $0 \sim 40$ \square C, $260 \times 180 \times 115$ mm

2039 02	1/5A, 45 ~ 65 Hz, 0 ~ 40 □C, 260 x 180 x 115 mm
2039 01	$0.2/1 \text{ A}, 45 \sim 65 \text{ Hz}, 0 \sim 40 \ \Box \text{C}, 260 \text{ x } 180 \text{ x } 115 \text{ mm}$

Specifications

Name	Description	File Type	
List of JIS Mark Indications		₹ 54 KB	Download

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List of JIS Mark Indications

Product Mode		del	Specificatio	ns	JIS mark	Product	Мо	del	Specifications		JIS mark	
		31	3/10/30/100	μΑ	None			31	45~65Hz 120/240V		None	1
		32	10/30/100/300	μΑ	Ічоле			32	20~100Hz 120/240V		TAOHE	
DC ammeter		33	0.1/0.3/1/3	mA		Needle-indicator	2038	03	100~300Hz 120/240V			1
(4 ranges)	anges) :	34	1/3/10/30	mA		frequency meter 04 300~		300~500Hz 120/240V		NI		
_		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			
ne 6 .	1	38	0.3/1/3/10	V		Power factor meter	2039	02	1/5A 120V		None	
DC voltmeter		39	3/10/30/100	V	(3)			03	5/25A 120V			
(4 ranges)		40	30/100/300/1000	V		_		01	0.2/1A 120/240V			
DC ammeter	1	41	(50n	nV)	(x)	Single-phase wattmeter		02	1/5A 120/240V		(
DC voltmeter	1	42	(3	V)	(x)			03	5/25A 120/240V			
DC ammeter and voltmeter	2012	00	17 ranges		(x)		2041	11	0.2/1A 120/240V Power fac	ctor: 0.2		
		01	20/100	mA			2041	12	1/5A 120/240V Power fac	ctor: 0.2		ı
		02	50/250	mA	1	Single-phase low power		13	5/25A 120/240V Power fac	ctor: 0.2	None	
		03	100/500	mA		factor wattmeter		21	0.2/1A 30/60V Power fac	ctor: 0.2		
		04	0.2/1	Α				22	1/5A 30/60V Power fac	ctor: 0.2		
AC ammeter		05	0.5/2.5	Α	(3)			01	0.2/1A 120/240V			
(2 ranges)		06	1/5	A	i i	Three-phase wattmeter	2042	02	1/5A 120/240V		(c)	
		07	2/10	Α				03	5/25A 120/240V			
		08	5/25	Α				01	30/100/300/1000/3000 μ	ιA		
		09	10/50	Α]			02	0.3/1/3/10/30 m	ıA	C.N	
	1	10	20/50/100/200	mA				03	10/30/100/300/1000 m	ıΑ	(\mathcal{E})	
		11	0.1/0.2/0.5/1	A				04	0.3/1/3/10/30	A		
AC ammeter		12	0.5/1/2/5	Α	(&)	M:-: DC		11	±0.15/0.5/1.5/5/15 m	1A		
(4 ranges)		13	2/5/10/20	Α		Miniature DC ammeter		12	±0.3/1/3/10/30 m	1A		
	2013	14	10/20/50/100	Α]			13	±5/15/50/150/500 m	nΑ	Θ	
-	1	15	15/30	V			2051	14	±10/30/100/300/1000 m	nΑ	(J)	
		16	30/75	V]			15	±0.15/0.5/1.5/5/15	A		
AC voltmeter	,	17	75/150	V	(3)			16	±0.3/1/3/10/30	A		
(2 ranges)].	18	150/300	V]]	· · · · · · · · · · · · · · · · · · ·		05	0.3/1/3/10/30	V		
	1	19	300/750	V	1			06	3/10/30/100/300	v [
AC ammeter	1	20	(5	A)		Minimum DC h		17	±0.15/0.5/1.5/5/15	V	(x)	
AC voltmeter	1	21	(15)		€)	Miniature DC voltmeter		18	±0.3/1/3/10/30	V	עש	
AC ammeter	1	22	500 (500AT)	A	1 l			19	±1.5/5/15/50/150	V		
	1	23	0.5/1/2/5	Α			L	20	±3/10/30/100/300	v _		
AC voltmeter		24	2/5/10/20	Α	(3)			01	0.5/1/2.5 m	nΑ		
(4 ranges) (for 400 Hz)		25	10/20/50/100	Α	1	Minimum AC		02	2.5/5/10 m	ηA	(x)	
AC voltmeter	1	26	75/150	V		Miniature AC ammeter		03	10/25/50 m	nΑ	(J)	
(2 ranges) (for 400 Hz)		27	150/300	V	(x)		2052	04	50/100/250 m	nA		
AC ammeter and voltmeter	2014	00	13 ranges		€)			05	3/7.5/15	٧		1
		01	5/10/20/50	mA		Miniature AC voltmeter		06	15/30/75	V	(x)	
High-frequency		02	20/50/100/200	mA	None			07	75/150/300	V		
AC ammeter	2016	03	100/200/500/1000	mA]]			01	0.25/0.5/1	A		
High-frequency AC voltmeter	1	04	15/30/75/150	V	None	Miniature AC ammeter	2053	02	1/2.5/5	Α	(x)	
Audio-frequency voltmeter 2017		30	30/75/150/300	V	None			03	5/10/25	A		