

# Power Factor, Frequency & Synchroscope Meters

## Yokogawa AB40 Replacements

### MCS Series

- Rugged, Durable Construction
- Readable Even from Sharp Angles
- 1% Accuracy Class
- Metal Case
- UL Recognition (optional)


**MCS**


### ORDERING INFORMATION

#### Power Factor

Amperes	Volts (L-L)	Scale	Cat. No.
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#### Single-Phase 2 Wire 60 Hz

5	120	.5-1-.5	103 412 FCAD
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#### 3-Phase 3 & 4 Wire, 50 & 60 Hz, Balanced System Only

5	120	.5-1-.5	103 402 FCAD
5	208	.5-1-.5	103 402 FDAD
5	240	.5-1-.5	103 402 FEAD
5	480	.5-1-.5	103 402 FFAD
5	600	.5-1-.5	103 402 FGAD

#### Frequency Meters, 120V Rated

Scale (Hz)	Center Freq, Hz	Cat. No.	Accuracy
45-55	50	103 372 AGAG	±0.15 Hz
45-65	55	103 372 AJAJ	±0.25 Hz
48-52	50	103 372 AKAK	±0.08 Hz
50-70	60	103 372 ALAL	±0.25 Hz
55-65	60	103 372 ANAN	±0.15 Hz
58-62	60	103 372 ATAT	±0.08 Hz
59-61	60	103 372 ASAS	±0.047 Hz
350-450	400	103 372 BHBH	±1.3 Hz
390-410	400	103 372 BLBL	±0.492 Hz

#### Synchrosopes

Scale	Normal Freq, Hz	VAC	Cat. No.
Slow-Fast	50	120	106 452 ABAA
Slow-Fast	60	120	106 452 AAAA

### SPECIFICATIONS

#### In accordance with ANSI Specifications C39.1

#### Accuracy

Power Factor Meters	±1% of fiducial value from 40-120% of rated current
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Frequency Meters	see table
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Synchrosopes	±1% of scale length
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Operating Temperature Range	0-40°C (32°F-104°F)
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Dielectric Level	2,300 VAC for 1 minute between circuit and case
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Overload Rating	Voltage coils: 1.2x continuous.
	Current coils: 1.2x continuous, 10x for 0.5 seconds.
	Frequency meters: 1.2x continuous

Response Time	3 seconds maximum
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Position of Use	Vertical (scale)
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Full Scale Deflection Angle	250° (360° for synchrosopes)
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Barrel (cutout)	4.03"
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Full Scale Length	6.9" (except synchrosopes)
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#### Size (H x W x Depth)

Power Factor	4.33" x 4.33" x 3.25"
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Frequency	4.33" x 4.33" x 4.5"
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Synchroscope	4.33" x 4.33" x 4.5"
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