

SE-CUR-CLAMP-20-DC

CURRENT CLAMP



**CURRENT CLAMP, UP TO 20 A,
VOLTAGE OUTPUT, INCLUDED ADAPTER CABLE**



SPECIFICATIONS

f.s.: Maximum display value or scale length (indicates the rated current)

rdg.: Reading value (the value currently being measured and indicated on the measuring instrument)

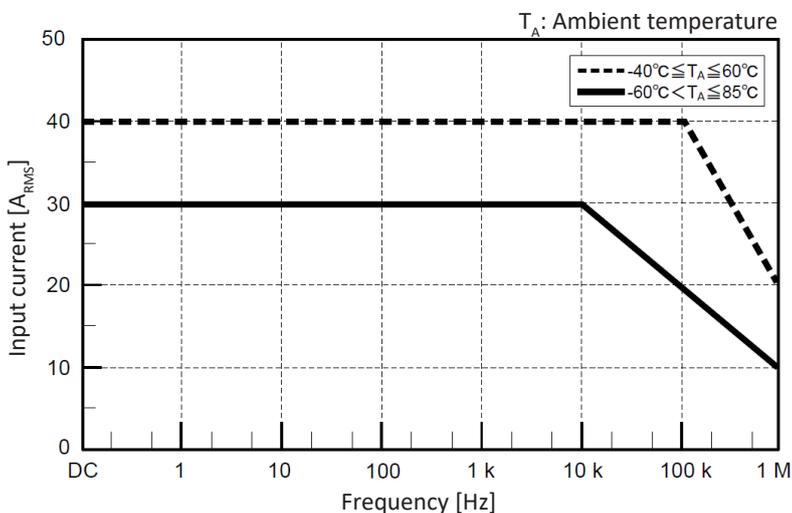
SE-CUR-CLAMP-20-DC				
Operating environment	Indoors, pollution degree II, altitude up to 2000 m (6562 ft.)			
Operating temperature and humidity	-40 to 85 °C (-40.0 to 185 °F), 80 % rel. humidity or less (no condensation)			
Storage temperature and humidity	-40 to 85 °C (-40.0 to 185 °F), 80 % rel. humidity or less (no condensation)			
Dielectric strength	4260 V _{AC} (current sensitivity: 1 mA), 50/60 Hz, for 1 min, between jaw and output connector of cable			
Standards	Safety: EN 61010-2-032:2012 Type D EMC: EN 61326-1:2013			
Product warranty period	1 year			
Rated current	20 A AC/DC			
Output voltage	0.1 V/A			
Maximum input current	Within the derating curve (see Frequency derating curve on page 2)			
Output resistance	50 Ω (±5 %)			
Temperature and humidity for guaranteed accuracy	0 to 40 °C (32 to 104.0 °F), 80 % rel. humidity or less			
Accuracy	Sine wave input; conductor at center position; connected with Model CT9555; not including each effect; measuring instrument that has an input resistance of 1 MΩ or higher			
	<ul style="list-style-type: none"> ▶ Amplitude accuracy: defined at the rated value or less and within the derating curve¹⁾; the accuracy defined for the frequency range of DC < f < 5 Hz is the design value) ▶ Phase accuracy: defined at the rated value or the maximum value of the derating curve, whichever is smaller; the accuracy defined for a frequency range of DC < f < 10 Hz is a design value 			
		Frequency	Amplitude	Phase
		DC	±0.3 % rdg. ±0.05 % f.s. ²⁾	-
		DC < f ≤ 100 Hz	±0.3 % rdg. ±0.01 % f.s.	±0.1°
		100 Hz < f ≤ 500 Hz	±0.3 % rdg. ±0.02 % f.s.	±0.2°
		500 Hz < f ≤ 1 kHz	±0.5 % rdg. ±0.02 % f.s.	±0.5°
		1 kHz < f ≤ 5 kHz	±1.0 % rdg. ±0.02 % f.s.	±1.0°
		5 kHz < f ≤ 10 kHz	±1.5 % rdg. ±0.02 % f.s.	±1.5°
		10 kHz < f ≤ 50 kHz	±2.0 % rdg. ±0.02 % f.s.	±(0.5 + 0.1 * f[kHz]) deg
		50 kHz < f ≤ 100 kHz	±5.0 % rdg. ±0.05 % f.s.	±(0.5 + 0.1 * f[kHz]) deg
		100 kHz < f ≤ 300 kHz	±10 % rdg. ±0.05 % f.s.	±(0.5 + 0.1 * f[kHz]) deg
	300 kHz < f ≤ 500 kHz	±15 % rdg. ±0.05 % f.s.	-	
	500 kHz < f ≤ 1 MHz	±30 % rdg. ±0.05 % f.s.	-	

SE-CUR-CLAMP-20-DC

SE-CUR-CLAMP-20-DC	
Guaranteed accuracy period	1 year, opening and closing of the jaw: up to 10 000 times
Offset adjustable range	±4 mV
Output noise	5 mV _{pp} or less (100 kHz or less)
Temperature coefficient	-40 °C to 0 °C and 40 °C to 85 °C
– Amplitude sensitivity	±0.01 % rdg./°C or less
– Offset voltage	±0.005 % f.s./°C or less
Effect of conductor position	±0.1 % rdg. or less (input current of 20 A, DC to 100 Hz, with the use of a 5 mm diameter wire)
Effect of external magnetic field	50 mA or less (value scaled to the input, in a DC or 60 Hz magnetic field of 400 A/m)
Effect of magnetization	10 mA or less (value scaled to the input, after 20 A _{DC} input)
Effect of common mode voltage	0.05 % f.s. or less (1000 V _{RMS} , DC to 100 Hz)
Effect of radiated radio-frequency electromagnetic field	6 % f.s. at 10 V/m
Effect of conducted radio-frequency electromagnetic field	6 % f.s. at 3 V
Measurable conductor diameter	∅20 mm (0.79 in.) or less
Supply voltage	±11 V to ±15 V (tracking)
Power supply capacity	±200 mA or less (when measuring a current of 20 A with a frequency of 55 Hz, while ±12 V power is supplied)
Maximum rated power	5 VA (when measuring a current of 20 A with a frequency of 55 Hz, while ±12 V power is supplied)
Dimensions (W x H x D)	Approx. 2153 x 67 x 25 mm (6.02 x 2.64 x 0.98 in.); excluding protrusions or cable
Mass	Approx. 350 g. (12.3 oz.)
Cable length	Approx. 3 m
Output connector	HIOKI ME15W

- 1) See frequency derating curve.
- 2) **INFORMATION** An accuracy of ±0.05 % f.s is accomplished after the offset voltage is adjusted within a range of ±0.5 mV.

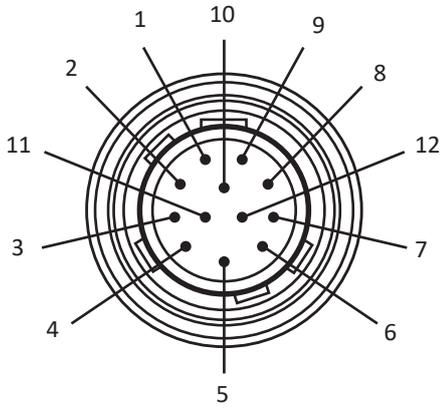
FREQUENCY DERATING CURVE



SE-CUR-CLAMP-20-DC



PIN ASSIGNMENT



- | | |
|--------------------|---------------|
| 1 Power supply (+) | 7 GND |
| 2 Power supply (-) | 8 GND |
| 3 ID1 | 9 Output (+) |
| 4 ID2 | 10 Output (-) |
| 5 ID3 (DEMAG) | 11 ID4 |
| 6 ID5 | 12 Shield |