HIOKI

3284 [200A rms, ø 33mm(1.30") max.]
3285/-20 [2000A rms, ø 55mm(2.17") max.]

CLAMP ON AC/DC HiTESTER

Field measuring instruments

2000 A analysis

(3285 /3285-20)

3285

3284

3285-20

Analysis for DC to distorted waves

CAT Ⅲ 600 V

CE

ISO14001
JQA-E-90091

INTERNET HIOKI Website
http://www.hioki.co.jp/

HIOKI company overview, new products, environmental considerations and other information are available on our website.

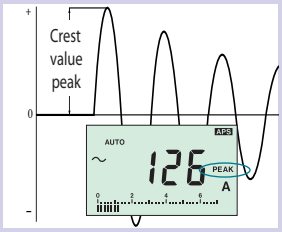
Analysis applications

Supporting a wealth of functions

Inrush current crest value

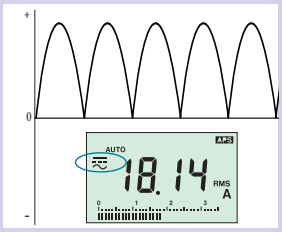
The peak hold function displays the crest value of the inrush current occurring when electrical equipment is started.

SLOW / PEAK / Hz



RMS value of full-wave rectified waveforms

The AC+DC mode enables measurement of the RMS value of full- or half-wave rectified waveforms used in electrical machinery.

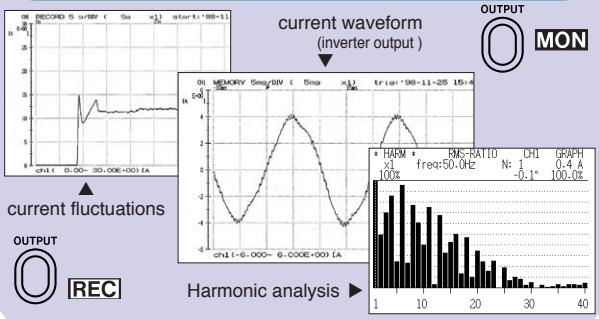


Waveform and harmonic analysis

Model 3284 and 3285 only

Using the external output functions of the 3284 or 3285 in combination with a HIOKI MEMORY HiCORDER enables recording of current and frequency fluctuations and recording and harmonic analysis of instantaneous waveforms. The monitor output (MON) spans a wide frequency range from DC to 20 kHz (15 kHz in the case of 3285), which allows the units to be used for electric current analysis in various fields ranging from batteries to inverters.

Example of analysis using the MEMORY HiCORDER



3284 / 3285 Specifications

[ ] in the Specification :3285,3285-20 Accuracy at 23 °C ± 5 °C (73 °F ± 9 °F), 80% rh or less.
Measurement accuracy applies to input of at least 5% of the current range, and at least 10% of the voltage/frequency range.

Function	Mode	Display Switch*1	Range	Accuracy at DC or 45 to 66 Hz	10 to 45Hz or 66 to 2 [1] kHz	PEAK accuracy at DC or 45 to 66 Hz	Notes
Current (A)	DC	Average / PEAK	20.00 / 200.0 [200.0 / 2000] Resolution is 0.1 [1] A during PEAK	±1.3%rdg.±3dgt.	—	±1.3%rdg.±7dgt.*6	**Max. allowable current**
	AC	RMS / PEAK		±1.3%rdg.±3dgt.*2	±2.0%rdg.±5dgt.*3*4	±1.3%rdg.±7dgt.*6	200Arms cont. 300A peak max.
	AC+DC	RMS / PEAK		±1.3%rdg.±13dgt.*2	±2.0%rdg.±7dgt.*3*4	±1.3%rdg.±7dgt.*6	[2000Arms cont. 2840A peak max.]
Voltage (V)	DC	Average / PEAK	30.00 / 300.0 / 600 Resolution is decreased by 1 digit except in the 600 V range during PEAK	±1.0%rdg.±3dgt.	—	±1.0%rdg.±7dgt.	**Max. allowable voltage**
	AC	RMS / PEAK		±1.0%rdg.±3dgt.	±1.5%rdg.±5dgt.	±1.0%rdg.±7dgt.*7	600Vrms cont. 1000V peak max.
	AC+DC	RMS / PEAK		±1.0%rdg.±7dgt.*5	±1.5%rdg.±7dgt.*5	±1.0%rdg.±7dgt.*7	
Frequency (Hz)	—	—	10.00 / 100.0/1000	±0.3%rdg.±1dgt.	±1.0%rdg.±1dgt. (at 1000Hz)	—	Effective in the V and A functions
Resistance(Ω)*8	—	—	1000/10.00k	±1.5%rdg.±5dgt.		—	Open terminal Voltage 3.1V DC or less
Continuity Check*9	—	—	1000	Threshold level 30Ω ±5Ω or less		—	

*1 The peak hold function works automatically during PEAK measurement. *2 Add ±1.0% rdg. in the 1800 to 2000 A interval for the 3285. *3 Add ±1.0% rdg. in the 1k to 2kHz interval for the 3284. *4 No assured accuracy in the 1800 to 2000 A interval for the 3285. *5 Add 6 dgt. in the 30 V range. *6 Add ±4.7% rdg. in the 2300 to 2840 A interval for the 3285. *7 Add ± 1.0%rdg.±13dgt when measuring 700 V to 1000V with Model 3285-20. *8 Model 3285-20 only.

Measurable conductor diameter	: ø33 (1.30") mm, [ø55 (2.17") mm] max.
Max. usable circuit voltage	: 600Vrms (insulated conductor)
Functions	: recording (MAX. MIN. AVE) ,data hold, auto power-off, auto zero
Display update rate	: digital indication FAST approx. 4 times/second, NORMAL approx. 2 times/second, SLOW 1 time/ 3 seconds; bar graph indication approx. 4 times/second
Display response time	: 1 sec or less
Range switching	: Auto/Manual (Except resistance.)
Frequency characteristic	: 40 Hz to 2 [1] kHz accuracy
External output (Except model 3285-20)	: A/Hz only: recording output DC1V/f.s. ±1.3% rdg.±10mV, Response: 250ms or less (at 0→90%)/ MON A only : Waveform output 1Vrms/f.s. ±1.3% rdg.±5mV, Frequency band: DC to 20 [15] kHz ±3dB
Effect of conductor position	: within ±0.5[0.7] % in any direction from the center of sensor
Effect of external magnetic field	: 400A/m corresponds to 0.5 [2] A max.
Crest factor	: 2.5 or less, 1.7 or less in the 600 V range, 3284 is 1.5 or less in the 200A range [1.42 or less in the 2000A range]
Safety standard	: EN61010-1 CAT III 600V, EN61010-2-032, EN60529 IP40
EMC	: EN61326, EN61000-3-2, EN61000-3-3
Ambient temperature of use	: 0 to 40°C (32°F to 104°F), 80%rh or less (no condensation)
Storage temperature range	: -10 to 50°C (14°F to 122°F) or less (no condensation)
Power supply	: 9445 AC ADAPTER(Except Model 3285-20.) or 6F22 manganese battery×1 (continuous operation : Model 3284/3285-25 hours, Model 3285-20-20 hours)
Dimensions and mass	: Approx. 62W×230[260]H×39D mm, 460 [540]g (Approx 2.45" W× 9.06[10.3]" H× 1.54" D, 16.3 [19.1] oz.)

3284 CLAMP ON AC/DC HiTESTER
3285 CLAMP ON AC/DC HiTESTER
3285-20 CLAMP ON AC/DC HiTESTER
(All include 9207-10 TEST LEADS, 9399 CARRYING CASE(3284), 9345 CARRYING CASE(3285/3285-20), HAND STRAP)

Options

9445-02 AC ADAPTER (UL)
9445-03 AC ADAPTER (EU)
An AC Adapter can only be used with Models 3284 and 3285.
* **9094** OUTPUT CORD(Jack to banana plug) *No CE marking

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All information correct as of Oct. 11, 2005. All specifications are subject to change without notice.

3284E6-5XM-05K Printed in Japan