

جدول راهنمای انتخاب کلمپ آمپرترهای هیوکی ژاپن

Model	CM4371, CM4372	CM4373, CM4374	3280-10F, 3280-20F	3281, 3282	3284, 3285
					
True RMS rectifier	✓ Crest factor 7.5 at 20.00 A range 3 or less at 600.0A range	✓ Crest factor 3 or less at 600.0 A range 2.84 or less at 2000 A range	(3280-20F) ✓ Crest factor 2.5 or less	✓ Crest factor 2.5 or less 3281: 2.5 (1.7 at 600 A range) 3282: 2.5 (1.7 at 1000 A range)	✓ Crest factor 2.5 or less 3284: 2.5 (1.5 at 200 A range) 3285: 2.5 (1.42 at 2000 A range)
MEAN rectifier	N/A	N/A	(3280-10F) ✓	N/A	N/A
AC Current ranges	20.00 A/ 600.0 A	600.0 A/ 2000 A	42.00 A/ 420.0 A/ 1000 A	(3281) 30.00/ 300.0/ 600 A (3282) 30.00/ 300.0/ 1000 A	(3284) 20.00/ 200.0 A (3285/3285) 200.0/ 2000 A
AC Voltage ranges	6.000/ 60.00/ 600.0 V/ 1000 V	6.000/ 60.00/ 600.0 V/ 1000 V	4.200 / 42.00/ 420.0/ 600 V	300.0/ 600 V	30.00/ 300.0/ 600 V
Frequency characteristics	AC A: 10 Hz to 1 kHz AC V: 15 Hz to 1 kHz	AC A: 10 Hz to 1 kHz AC V: 15 Hz to 1 kHz	(3280-10F) AC A: 50 to 60 Hz (3280-20F) AC A: 40 to 1 kHz AC V: 45 to 500 Hz	40 to 1000 Hz	(3284) DC, 10 to 2 kHz (3285) DC, 10 to 1 kHz
DC Current ranges	20.00 A/ 600.0 A	600.0 A/ 2000 A	N/A	N/A	(3284) 20.00/ 200.0 A (3285) 200.0/ 2000 A
DC Voltage ranges	600.0 m/ 6.000/ 60.00/ 600.0 V/ 1500 V	600.0 m/ 6.000/ 60.00/ 600.0 V/ 1500 V	420.0 m/ 4.200/ 42.00/ 420.0/ 600 V	N/A	30.00/ 300.0/ 600 V
Basic accuracy (at 50/60Hz)	AC A: ±1.3% rdg. ±3 dgt. AC V: ±0.9% rdg. ±3 dgt. DC A: ±1.3% rdg. ±8 dgt. DC V: ±0.5% rdg. ±3 dgt.	AC A: ±1.3% rdg. ±3 dgt. AC V: ±0.9% rdg. ±3 dgt. DC A: ±1.3% rdg. ±8 dgt. DC V: ±0.5% rdg. ±3 dgt.	AC A: ±1.5% rdg. ±5 dgt. AC V: ±1.8% rdg. ±7 dgt. DC V: ±1.0% rdg. ±3 dgt.	AC A: ±1% rdg. ±5 dgt. AC V: ±1% rdg. ±3 dgt.	AC A: ±1.3% rdg. ±3 dgt. AC V: ±1.0% rdg. ±3 dgt.
Resistance ranges	600.0 Ω to 600.0 kΩ, 4 ranges	600.0 Ω to 600.0 kΩ, 4 ranges	419.9 Ω to 41.99 MΩ, 6 ranges	1000 or 10.00 kΩ	N/A
Continuity	✓	✓	✓	✓	N/A
Frequency (Hz)	✓	✓	N/A	✓	✓
Other functions	Automatic AC/DC detection, Plus/Minus judgement function of DCA, DC V, Max/Min/Average/PEAK MAX/ PEAK MIN value display, Filter function, Display value hold, Auto hold, Back light, Auto-power save, Buzzer sounds, Zero-adjustment, Bluetooth® wireless technology (CM4372)	Automatic AC/DC detection, Plus/Minus judgement function of DC A, DC V, Max/Min/Average/PEAK MAX/ PEAK MIN value display, Filter function, Display value hold, Auto hold, Back light, Auto-power save, Buzzer sounds, Zero-adjustment, Bluetooth® wireless technology (CM4374)	Continuity: Buzzer sounds at 50 Ω ±40 Ω or less, Data hold, Auto power save, Drop-proof from height of 1 meter	Current wave peak value, Voltage wave peak value, Distortion check, Max./ Min./ Average value record, Data hold, Auto power off	AC+DC mode, Max./ Min./ Average value record, Data hold, Peak hold, Auto power off, Auto zero
Monitor / Analog output	N/A	N/A	N/A	N/A	✓
Display refresh rate	5 times/s	5 times/s	2.5 times/s	2.5 times/s, 1 time/3s	4 times/s (FAST), 1 time/3s (SLOW)
Max. rated voltage to earth	600 V AC rms	600 V AC rms	600 V AC rms	600 V AC rms	600 V AC rms
Measurement categories (current)	CAT IV 600 V CAT III 1000 V	CAT IV 600 V CAT III 1000 V	CAT IV 300V CAT III 600V	3281: CAT III 600V 3282: CAT IV 600V	CAT III 600V
Measurement categories (voltage)	CAT IV 600 V CAT III 1000 V	CAT IV 600 V CAT III 1000 V	CAT III 300V CAT II 600V	CAT IV 600V	CAT III 600V
Core jaw diameter	φ33 mm	φ55 mm	φ33 mm	(3281) φ33 mm (3282) φ46 mm	(3284) φ33 mm (3285) φ55 mm
Power supply	LR03 Alkaline battery ×2	LR03 Alkaline battery ×2	CR2032 × 1	6F22 (006P) × 1	6F22 (006P) × 1, or AC adapter
Model	CM4371	CM4373	3280-10F	3281	3284
Dimensions and mass	65 mm (2.56 in) W × 215 mm (8.46 in) H × 35 mm (1.38 in) D mm, 340 g (12.0 oz)	65 mm (2.56 in) W×250 mm (9.84 in) H×35 mm (1.38 in) D mm, 530 g (18.7 oz)	57 mm (2.24 in) W × 175 mm (6.89 in) H × 16 mm (0.63 in) D, 100 g (3.5 oz)	62 mm (2.44 in) W × 218 mm (8.58 in) H × 39 mm (1.54 in) D, 350 g (12.3 oz)	62 mm (2.44 in) W × 230 mm (9.06 in) H × 39 mm (1.54 in) D, 460 g (16.2 oz)
Model	CM4372	CM4374	3280-20F	3282	3285
Dimensions and mass	65 mm (2.56 in) W × 215 mm (8.46 in) H × 35 mm (1.38 in) D mm, 340 g (12.0 oz)	65 mm (2.56 in) W×250 mm (9.84 in) H×35 mm (1.38 in) D mm, 530 g (18.7 oz)	57 mm (2.24 in) W × 175 mm (6.89 in) H × 16 mm (0.63 in) D, 100 g (3.5 oz)	62 mm (2.44 in) W × 230 mm (9.06 in) H × 39 mm (1.54 in) D, 400 g (14.1 oz)	62 mm (2.44 in) W × 260 mm (10.24 in) H × 39 mm (1.54 in) D, 540 g (19.0 oz)

جدول راهنمای انتخاب کلمپ آمپرترهای هیوکی ژاپن

Model	3287, 3288, 3288-20	3291-50	3283, 3283-20	3293-50	3286-20
					
True RMS rectifier	3287, 3288-20: ✓ Crest factor 3287: 2.5 (150 A, 100 V max.) 3288-20: 3 (2 at 1000 A, 1.5 at AC V)	✓ Crest factor 2.8 or less (1.68 at 1000 A range)	✓ Crest factor 2.5 (1.5 at 200 A range)	✓ Crest factor 2.8 or less (1.68 at 1000 A range)	✓ Crest factor 2.5 or less (1.7 at 1000 A, 600 V range)
MEAN rectifier	3288: ✓	N/A	N/A	N/A	N/A
AC Current ranges	(3287) 10.00/ 100.0 A (3288/3288-20) 100.0/ 1000 A	60.00/ 600.0/ 1000 A	10.00 m/ 100.0 m/ 1.000/ 10.00/ 200.0 A	30.00 m/ 300.0 m/ 6.000/ 60.00/ 600.0/ 1000 A	20.00/ 200.0/ 1000 A
AC Voltage ranges	(3287) 10.00/ 100.0 A (3288/3288-20) 100.0/ 1000 A	N/A	N/A	N/A	150.0/ 300.0/ 600 V
Frequency characteristics	(3287) DC, 10 to 1 kHz (3288/3288-20) DC, 10 to 500 Hz AC V: 30 to 500 Hz	45 to 400 Hz	40 to 2 kHz	45 to 400 Hz	AC A: 45 to 1 kHz AC V: 30 to 1 kHz
DC Current ranges	(3287) 4.200/ 42.00/ 420.0/ 600 V (3288/3288-20) 4.200/ 42.00/ 420.0/ 600 V	N/A	N/A	N/A	N/A
DC Voltage ranges	420.0 m/ 4.200/ 42.00/ 420.0/ 600 V	N/A	N/A	N/A	N/A
Basic accuracy (at 50/60Hz)	AC A: ±1.5 % rdg. ±5 dgt. AC V: ±2.3 % rdg. ±8 dgt. DC A: ±1.5 % rdg. ±5 dgt. DC V: ±1.3 % rdg. ±4 dgt.	AC A: ±1.5 % rdg. ±5 dgt.	AC A: ±1.0 % rdg. ±5 dgt. (at 10 m to 10 A range)	AC A: ±1.5 % rdg. ±5 dgt.	AC A: ±1.3 % rdg. ±3 dgt. AC V: ±1.0 % rdg. ±3 dgt.
Resistance ranges	420.0 Ω to 42.00 MΩ, 6 ranges	N/A	N/A	N/A	N/A
Continuity	✓	N/A	N/A	N/A	N/A
Frequency (Hz)	N/A	N/A	✓	N/A	✓
Other functions	Data hold, Auto power save, Auto zero (DC A)	N/A	Filter function, Max./ Min./ Average value record, Data hold, Auto power off	N/A	Power: ±2.3% rdg. ±5 dgt. (at single phase, P.F.=1), ±3.0% rdg. ±10 dgt. (at balanced three phase, P.F.=1)
Monitor / Analog output	N/A	N/A	3283 : ✓ 3283-20 : N/A	N/A	N/A
Display refresh rate	2.5 times/s	1.1 sec or less	4 times/s (Fast), 1 time/3s (Slow), 4 times/s (bar graph)	1.1 sec or less	1 time/s (Normal) 1 time/3s (Slow), 1 time/2s (Harmonic level)
Max. rated voltage to earth	600 V AC rms	600 V AC rms	300 V AC rms	300 V AC rms	600 V AC rms
Measurement categories (current)	CAT III 600V	CAT III 600V CAT IV 300V	CAT III 300V	CAT III 300V	CAT III 600V
Measurement categories (voltage)	CAT III 300V CAT II 600V	N/A	N/A	N/A	CAT III 600V
Core jaw diameter	φ35 mm	φ30 mm	φ40 mm	φ24 mm	φ55 mm or 80 mm bus-bar
Power supply	CR2032 × 1	CR2032 × 1	3283: 6LR61/6F22 (006P) ×1, or AC Adapter 3283-20: 6LR61/6F22 (006P) ×1	CR2032 × 1	6LR61/6LF22 (006P) × 1
Model	3287	3291-50	3283, 3283-20	3293-50	3286-20
Dimensions and mass	57 mm (2.24 in)W × 180 mm (7.09 in)H × 16 mm (0.63 in)D, 170 g (6.0 oz)	50 mm (1.97 in) W × 136 mm (5.35 in) H × 26 mm (1.02 in) D, 115 g (4.1 oz)	62 mm (2.44 in) W × 225 mm (8.86 in) H × 39 mm (1.54 in) D, 400 g (14.1 oz)	50 mm (1.97 in) W × 130 mm (5.12 in) H × 26 mm (1.02 in) D, 135 g (4.8 oz)	100 mm (3.94 in)W × 287 mm (11.3 in)H × 39 mm (1.54 in)D, 650 g (22.9 oz)
Model	3288, 3288-20				
Dimensions and mass	57 mm (2.24 in)W × 180 mm (7.09 in)H × 16 mm (0.63 in)D, 150 g (5.3 oz)				