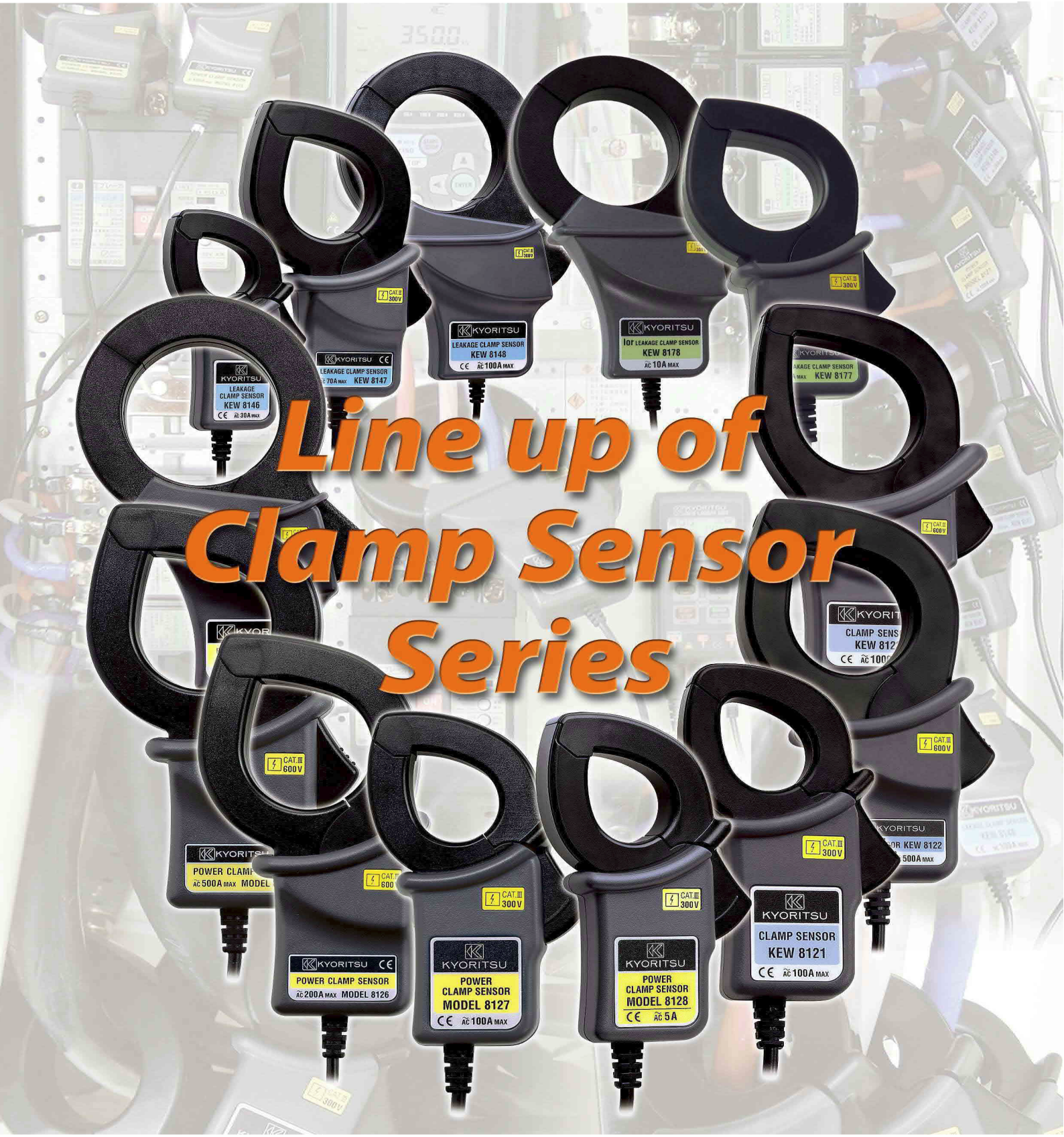
COSINUS®
MESSTECHNIK GMBH



Line up of Clamp Sensor Series

Non-contact Clamp-on system provides you clamp sensor in the existing facilities witho

Load current detection type clamp sensors provide superior characteristic in phase for the use of power meter

	MODEL 8128	MODEL 8127	MODEL 8126	MODEL 8125	MODEL 8124
					
	CE	CE	CE	CE	CE
	5A (MAX 50A) φ24	AC 100A φ24	AC 200A φ40	AC 500A φ40	AC1000A φ68
Conductor size	φ24mm	φ24mm	φ40mm	φ40mm	φ68mm
Rated current	AC 5A (Max.50A)	AC 100A	AC 200A	AC 500A	AC 1000A
Output voltage	AC 50mV/5A [Max. 500mV/50A](AC 10mV/A)	AC 500mV/100A (AC 5mV/A)	AC 500mV/200A (AC 2.5mV/A)	AC 500mV/500A (AC 1mV/A)	AC 500mV/1000A (AC 0.5mV/A)
Accuracy	±0.5%rdg±0.1mV (50/60Hz) ±1.0%rdg±0.2mV (40Hz - 1kHz)				±0.5%rdg±0.2mV (50/60Hz) ±1.5%rdg±0.4mV (40Hz - 1kHz)
Phase shift	within ±2.0° (45 - 65Hz)		within ±1.0° (45 - 65Hz)		
Withstand voltage	AC3540V for 5 seconds		AC5350V for 5 seconds		
Cable length : Output connector	Approx. 3m : MINI DIN 6pin				
Operating temperature ranges	-0 - 50°C, less than 85% RH (without condensation)				
Output impedance	Approx. 20Ω	Approx. 10Ω	Approx. 5Ω	Approx. 2Ω	Approx. 1Ω
Applicable Standards	IEC 61010-1, IEC 61010-2-032 CAT Ⅲ 300V pollution degree 2 IEC 61326		IEC 61010-1, IEC 61010-2-032 CAT Ⅲ 600V pollution degree 2 IEC 61326		
Dimensions	100(L)×60(W)×26(D)mm		128(L)×81(W)×36(D)mm		186(L)×129(W)×53(D)mm
Weight	Approx. 160g		Approx. 260g		Approx. 510g
Accessories	9095 (Carrying case) Instruction manual Cable marker				9094 (Carrying case) Instruction manual Cable marker
Options	7146 (Banana φ4 adjuster plug) 7185 (Extension cable)				

Load current detection types

	KEW 8121	KEW 8122	KEW 8123
			
	CE	CE	CE
	AC 100A φ24	AC 500A φ40	AC1000A φ55
Conductor size	φ24mm	φ40mm	φ55mm
Rated current	AC 100A	AC 500A	AC 1000A
Output voltage	AC 50mV/100A (AC 5mV/A)	AC 500mV/500A (AC 1mV/A)	AC 500mV/1000A (AC 0.5mV/A)
Accuracy	±2.0%rdg±0.3mV (50/60Hz) ±3.0%rdg±0.5mV (40Hz - 1kHz)		
Withstand voltage	AC3540V for 5 seconds	AC5350V for 5 seconds	
Cable length : Output connector	Approx. 2m : MINI DIN 6pin		
Operating temperature ranges	-0 - 40°C, less than 85% RH (without condensation)		
Output impedance	Approx. 9.5Ω	Approx. 1.9Ω	Approx. 1.5Ω
Applicable Standards	IEC 61010-1, IEC 61010-2-032 CAT Ⅲ 300V pollution degree 2 IEC 61326	IEC 61010-1, IEC 61010-2-032 CAT Ⅲ 600V pollution degree 2 IEC 61326	
Dimensions	97(L)×59(W)×26(D)mm	128(L)×81(W)×36(D)mm	170(L)×105(W)×48(D)mm
Weight	Approx. 150g	Approx. 260g	Approx. 360g
Accessories	9095 (Carrying case) Instruction manual Cable marker		9094 (Carrying case) Instruction manual Cable marker
Options	7146 (Banana φ4 adjuster plug) 7185 (Extension cable)		

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Leakage current & Load current detection types

	KEW 8146	KEW 8147	KEW 8148
			
	CE AC 30A ϕ24	CE AC 70A ϕ40	CE AC 100A ϕ68
Conductor size	ϕ24mm	ϕ40mm	ϕ68mm
Rated current	AC 30A	AC 70A	AC 100A
Output voltage	AC 1500mV/30A (AC 50mV/A)	AC 3500mV/70A (AC 50mV/A)	AC 5000mV/100A (AC 50mV/A)
Accuracy	0 - 15A ±1.0%rdg±0.1mV (50/60Hz) ±2.0%rdg±0.2mV (40Hz - 1kHz) 15 - 30A ±5.0%rdg (50/60Hz) ±10.0%rdg (45Hz - 1kHz)	0 - 40 ±1.0%rdg±0.1mV (50/60Hz) ±2.0%rdg±0.2mV (40Hz - 1kHz) 40 - 70A ±5.0%rdg (50/60Hz) ±10.0%rdg (45Hz - 1kHz)	0 - 80A ±1.0%rdg±0.1mV (50/60Hz) ±2.0%rdg±0.2mV (40Hz - 1kHz) 80 - 100A ±5.0%rdg (50/60Hz) ±10.0%rdg (45Hz - 1kHz)
Withstand voltage	AC3540V for 5 seconds		
Cable length : Output connector	Approx. 2m : MINI DIN 6pin		
Operating temperature ranges	-0 - 50˚C, less than 85% RH (without condensation)		
Output impedance	Approx. 90Ω	Approx. 100Ω	Approx. 60Ω
Applicable Standards	IEC 61010-1, IEC 61010-2-032 CAT Ⅲ 300V pollution degree 2 IEC 61326		
Dimensions	100(L)×60(W)×26(D)mm	128(L)×81(W)×36(D)mm	186(L)×129(W)×53(D)mm
Weight	Approx. 150g	Approx. 240g	Approx. 510g
Accessories	9095 (Carrying case) Instruction manual Cable marker		9094 (Carrying case) Instruction manual Cable marker
Options	7146 (Banana ϕ4 adjuster plug) 7185 (Extension cable)		

Load current Clamp sensors

	KEW 8130	KEW 8133	KEW 8135
			
	CE AC1000A ϕ110	CE AC3000A ϕ170	CE 5A (MAX 50A) ϕ75
Conductor size	max. ϕ110mm	max. ϕ170mm	max. ϕ75mm
Rated current	AC 1000A	AC 3000A	AC 5A (Max.50A)
Output voltage	AC 500mV/1000A (AC 0.5m V/A)	AC 500mV/3000A (AC 0.167m V/A)	AC 500mV/AC50A(10mV/A)
Accuracy	±0.8%rdg±0.2mV (45Hz - 65Hz) ±1.5%rdg±0.4mV (40Hz - 1kHz)	±1.0%rdg±0.5mV (45Hz - 65Hz) ±1.5%rdg±0.5mV (40Hz - 1kHz)	±1.0%rdg±0.5mV (45Hz - 65Hz)(0 - 50A) ±1.5%rdg±0.5mV (40Hz - 300Hz)(0 - 20A) ±1.5%rdg±0.5mV (300Hz - 1kHz)(0 - 5A)
Phase shift	within ±2.0° (45 - 65Hz),within ±3.0° (40Hz - 1kHz)		within ±3.0° (45 - 65Hz),within ±4.0° (40Hz - 1kHz)
Withstand voltage	AC 5160V(50/60Hz) for 5seconds		
Cable length Output connector	Approx. 3m MINI DIN 6pin		
Operating temperature & humidity ranges	-10 - 50˚C, less than 85% RH (without condensation)		
Output impedance	100Ω or less		
Applicable Standards	IEC 61010-1, IEC 61010-2-032 CAT Ⅳ 300V /CAT Ⅲ 600V Pollution degree 2, IEC 61326		
Dimensions	AMP box 65(L) × 24(W) × 22(D)mm (except for protrusions)		
Weight	Approx. 180g	Approx. 200g	Approx. 170g
Accessories	9095(Carrying case), Instruction manual,Cable marker		

Ior Leakage current Clamp sensors

KEW 8177

KEW 8178

Conductor size	ϕ40mm	ϕ68mm
Rated current	10A (rms) AC (14.1Apeak)	
Output voltage	500mV AC/10A AC	
Accuracy	±1.0%rdg±0.025mV (40Hz - 70Hz) ±4.0%rdg±0.025mV (30Hz - 5kHz, with inputs of 100mA or more)	
Phase shift	within 1.0% (45 - 70Hz while combining with KEW 5050, under the input of 10% or more of KEW 5050 leakage current range)	
Withstand voltage	AC 3470V(rms. 50/60Hz) for 5 sec. *Any combnation of: engaged Jaws,enclosure,output terminal	
Cable length : Output connector	Approx. 3m : MINI DIN 6pin	
Operating temperature ranges	-10 - 50°C, less than 85% RH (without condensation)	
Output impedance	Approx. 100Ω or less	Approx. 60Ω or less
Applicable Standards	IEC 61010-1, IEC 61010-2-032 CAT Ⅲ 300V Pollution degree 2, IEC 61326-1	
Dimensions	128(L)×81(W)×36(D)mm	186(L)×129(W)×53(D)mm
Weight	Approx. 280g	Approx. 560g
Accessories	9095 (Carrying case), Instruction manual, Cable marker	9094 (Carrying case), Instruction manual, Cable marker

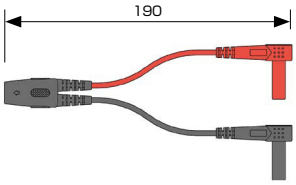
Applicable model table

		5010	5020	5050	6305	6315
Load current	8121	✓	✓	✓*8		
	8122	✓	✓	✓*8		
	8123	✓	✓	✓*8		
	8124	✓	✓	✓*8	✓	✓
	8125	✓*1	✓*1	✓*8	✓	✓
	8126	✓*2	✓*2	✓*8	✓	✓
	8127	✓*3	✓*3	✓*8	✓	✓
	8128	✓	✓	✓*8	✓	✓
	8130	✓*4	✓*5	✓*8	✓	✓
	8133			✓*8	✓	✓
	8135	✓	✓		✓*6	✓
Leakage & Load current	8146	✓	✓	✓*8		✓*7
	8147	✓	✓	✓*8		✓*7
	8148	✓	✓	✓*8		✓*7
Ior Leakage current	8177			✓		
	8178			✓		

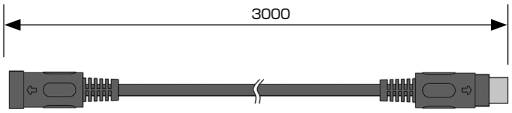
*1-6 Can use with after the following serial numbers.
*1: 8125 No.02637 -
*2: 8126 No.00151 -
*3: 8127 No.00181 -
*4: 5010 No.8029792 -
*5: 5020 No.8031560 -
*6: 6305 No.8369312 -
*7: Cannot be used for power measurement.
*8: Cannot be used for Ior measurement.

● Options

MODEL 7146
Banana Ø4 Adjuster Plug



MODEL 7185
Extension cable



● Overall diameter

Overall Diameter (mm)	Ⅳ 600V Single Core	SV(VVR) 600V Three Cores	CV(CE) 600V Single Core	CV(CE) 600V Three Cores	CVT 600V Three Cores	CV(CE) 3300V Single Core	CV(CE) 3300V Three Cores	CV(CE) 6600V Single Core	CV(CE) 6600V Three Cores
8	6.0	18.4	8.6	16.0	—	13.5	24	16.5	32
14	7.6	19.9	9.5	17.5	21.0	14.0	26	17.5	34
22	9.2	23.5	11.0	21.0	24.0	15.5	29	18.5	37
30	10.1	25.7	12.0	24.0	—	16.0	31	19.5	39
38	11.4	28.7	13.0	25.0	28.0	17.5	33	21.0	41
50	12.6	31.5	15.0	30.0	—	19.5	38	22.0	44
60	13.6	34.8	16.0	31.0	33.0	21.0	40	23.0	46
80	15.5	38.3	17.0	35.0	—	22.0	43	25.0	49
100	17.0	41.9	20.0	40.0	41.0	24.0	46	26.0	52
125	18.9	46.4	21.0	43.0	—	25.0	50	28.0	55
150	20.5	50.1	23.0	46.0	47.0	27.0	53	29.0	58
200	23.0	56.6	26.0	54.0	55.0	30.0	60	32.0	60
250	25.5	62.0	28.0	59.0	60.0	32.0	65	35.0	70
325	28.6	69.2	32.0	65.0	66.0	35.0	71	38.0	77
400	31.3	—	34.0	72.0	72.0	39.0	—	—	—
500	34.4	—	38.0	81.0	80.0	42.0	—	—	—

● Measurement categories

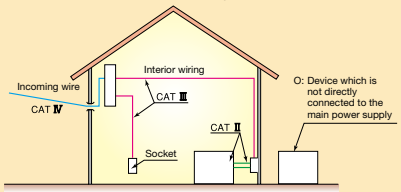
To ensure safe operation of measuring instruments, IEC 61010 establishes safety standards for various electrical environments, categorized as O to CAT Ⅳ, and called measurement categories. Higher-numbered categories correspond to electrical environments with greater momentary energy, so a measuring instrument designed for CAT Ⅲ environments can endure greater momentary energy than one designed for CAT Ⅱ.

O : Circuits which are not directly connected to the mains power supply.

CAT Ⅱ : Electrical circuits of equipment connected to an AC electrical outlet by a power cord.

CAT Ⅲ : Primary electrical circuits of the equipment connected directly to the distribution panel, and feeders from the distribution panel to outlets.

CAT Ⅳ : The circuit from the service drop to the service entrance, and to the power meter and primary overcurrent protection device (distribution panel).



Safety Warnings :

Please read the "Safety Warnings" in the instruction manual supplied with the instrument thoroughly and completely for correct use. Failure to follow the safety rules can cause fire, trouble, electrical shock, etc. Therefore, make sure to operate the instrument on a correct power supply and voltage rating marked on each instrument.

COSINUS Messtechnik - Ihr Partner für Messlösung in allen elektrischen und physikalischen Anwendungen

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