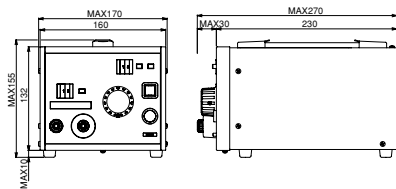


WITHSTANDING VOLTAGE TESTER

耐压测试仪 TOS8030C

用于简易测试的紧凑型号
Compact model supporting the simplified test



新产品



也备有采用
英文的型号
The English inscription model
is also provided.
还备有操作面板和使用说明书采用
英文的型号。有关这些型号的
详情，欢迎来电垂询。
There is a model that comes with
English version of the operation
panel and operation manual.
For details, contact us.

特点 Features

- 小型、轻量 (160W × 132H × 230D · 约 6 kg)
- 带分辨率为 0.1 秒的数字计时器 (0.5 s ~ 9.9 s, 1 s ~ 99 s)
- 在 0.1 mA ~ 10 mA 内判定
- 搭载了过零投入开关
- 确保安全性的高输出端子，大型 DANGER 指示灯
- Compact and lightweight (160 W × 132 H × 230 D mm; approx. 6 kg)
- Digital timer (0.5 to 9.9 s; 1 to 99 s, Resolution: 0.1 s)
- Judgement range: 0.1 mA to 10 mA
- Zero turn-on switch
- Safe high-voltage output terminal and large DANGER lamp

TOS8030C 是 3 kV/10 mA 的耐压测试仪。本机在小型轻量的同时，还能够判断从 0.1 mA 到 10 mA、0.1 mA 分辨率。并配备了计时器功能、信号输出以及遥控端子。

TOS8030C is an AC withstanding voltage tester supporting an AC output of 3 kV/10 mA. While being a small and lightweight model, the tester judge from 0.1 mA to 10 mA in 0.1 mA steps and has many features including timer, signal output and remote control function.



规格 Specifications

本章描述本测试仪的电气规格和机械规格。若无特别指定，本测试仪规格的设置及条件如下。

●预热时间：30 分 ●温度：5℃ 到 35℃ ●湿度：20% 到 80% RH（无凝结露水） ●xx% of reading 是指电压计（或电阻计）的读数的 xx%。

耐压测试仪

[输出部]

输出电压范围	0.05 kV 到 3.00 kV/1 量程
最大额定负载(*1)	30 VA (3 kV/10 mA) (在额定输入电压时)
输出电压波形(*2)	商用电源波形
电压变动率	20% 以下 (从最大额定负载到无负载的迁移过程)
开关	使用过零投入开关

[电压计]

显示	数字显示 3 位
测量范围	0.00 kV 到 4.00 kV
显示分辨率	10 V
精确度	Vm ≥ 1.00 kV: ± (5% of reading) Vm < 1.00 kV: ± (5% of reading + 30 V)
	Vm: 测量电压值
响应	平均值响应 / 有效值显示

*1 关于输出时间限制

根据电流上限基准值以及工作温度，连续输出时间会受到限制。

*2 关于测试电压波形

若容量性的负载上加交流电压，则根据负载容量值的不同，可能即使与无负载相比，输出电压还要上升。若是负载了容量值对电压有依存性的测试材料（如陶瓷电容等），则可能产生波形扭曲。但测试电压为 1.5 kV 时，1000 pF 以下容量的影响可忽略不计。

[判定功能]

上限基准值	×0.1 mA 量程：可在 0.1 mA 到 9.9 mA 范围内， 以 0.1 mA 为单位设定 ×1 mA 量程：可在 1 mA 到 10 mA 范围内， 以 1 mA 为单位设定
判定精确度	上限基准值 ≥ 1 mA: ± (5% + 20 μA) 上限基准值 < 1 mA: ± (5% + 40 μA)

[时间]

测试时间	×0.1 量程：0.5 s 到 9.9 s，分辨率：0.1 s ×1 量程：1 s 到 99 s (备有关闭定时器功能)， 分辨率：1 s
精确度	-0 ms, +50 ms

共通项目，其他功能

[遥控]

连接器	背面板 5 针 DIN 连接器
可能的控制	测试的开始 / 中止
可连接的选购件	遥控器：RC01C-TOS, RC02C-TOS 高电压测试探针：HP01AC-TOS, HP02AC-TOS

[信号输入输出]

连接器	后面板 14 针无螺丝端子
状态信号输出	输出准备就绪信号、有高压信号、合格信号、 不合格信号以及保护信号 闭合接点信号（接点额定值：1 A / 30 Vdc）
联锁(INTERLOCK)	端子间开放时为保护 (PROTECTION) 状态
输入端子	

普通规格

[环境]

工作环境	室内使用，高度 2000 m 为止
规格保证范围	温度 5℃ 到 35℃ 湿度 20% 到 80% RH（无凝结露水状态）
工作范围	温度 0℃ 到 40℃ 湿度 20% 到 80% RH（无凝结露水状态）
保存范围	温度 -40℃ 到 70℃ 湿度 90% RH 以下（无凝结露水状态）

[交流输入]

公称输入额定值	220 Vac 50 Hz/60 Hz
输入电压范围	200 V 到 240 Vac
消耗电力	无负载时（准备就绪状态）50 VA 以下
额定负载时	最大 45 VA
[绝缘电阻]	交流输入 (AC INPUT) 一机壳间 30 MΩ 以上 (500 Vdc)

[耐压]

交流输入 (AC INPUT) 一机壳间

1390 Vac, 2 秒内加载，10 mA 以下

25 Aac/0.1 Ω 以下

[外形尺寸(最大部分)]... 160 (170) W × 132 (155) H × 230 (270) D mm

[质量]... 约 6 kg

[附属品]... 高电压测试导线 TL01C-TOS (约 1.5 m): 1 组 /
电源线: 1 根 / 联锁 (INTERLOCK) 用跳线: 1
根 / 使用说明书: 1 本

Provides the electrical and mechanical specifications for the TOS8030C. The specifications are based on the following conditions and settings, unless otherwise specified.

●Warm-up time: 30 minutes ●Temperature: 5°C to 35°C ●Humidity: 20% to 80% R.H. (with no dew condensation) ●“xx% of reading” represents xx% of voltmeter (or resistance meter) reading.

Withstanding Voltage Tester

[Output section]

Output voltage range	0.05 kV to 3.00 kV / single range
Maximum rated load (*1)	30 VA (3 kV/10 mA) (Normal input voltage)
Output voltage waveform (*2)	AC line waveform
Voltage regulation	20% or less (during transition from the maximum rated load to no-load)
Switching	A zero-start switch is used.

[Voltmeter]

Display	Digital three-digit indication
Measurement range	0.00 kV to 4.00 kV
Display resolution	10 V
Accuracy	Vm ≥ 1.00 kV: ± (5% of reading) Vm < 1.00 kV: ± (5% of reading + 30 V) where Vm: measured voltage value
Response	Mean value response/rms value indication

*1 Time limitations on the output

The continuous output time may be limited depending on the upper limit of the reference current value and the ambient temperature.

*2 Test voltage waveform

If AC voltage is applied to a capacitive load, the output voltage in certain cases may rise above the value at no-load, depending on the value of the capacitive portion of the load. Moreover, for samples whose capacity values show voltage dependency (as with ceramic capacitors), waveform distortions may result. However, for a test voltage of 1.5 kV, the effects of a capacity of 1000 pF or less may be ignored.

[Judgment function]

Upper reference limit	×0.1 mA range: May be set from 0.1 mA to 9.9 mA in 0.1 mA steps. ×1 mA range: May be set from 1 mA to 10 mA in 1 mA steps.
Judgment accuracy	Upper reference limit ≥ 1 mA: ± (5% + 20 μA) Upper reference limit < 1 mA: ± (5% + 40 μA)

[Time]

Test time	×0.1 mA range: 0.5 s to 9.9 s, Resolution: 0.1 s ×1 mA range: 1 s to 99 s (the TIMER off function provided), Resolution: 1 s
Timer accuracy	-0 ms, +50 ms

Common Items, Other Functions

[Remote control]

Connector	5-pin DIN connector on the rear panel
Control available	Start/stop of testing
Optional devices connectable	Remote control boxes: RC01C-TOS and RC02C-TOS High-voltage test probes: HP01AC-TOS and HP02AC-TOS

[Signal I/O]

Connector	14-pin screw-less terminal on the rear panel
Status signal output	Output of a READY signal / H.V ON signal / PASS signal / FAIL signal / PROTECTION signal Make-contact signal (contact rating: 1 A/30 Vdc)
INTERLOCK input terminal	A PROTECTION state is invoked when the terminals are open.

General Specifications

[Environment]

Operation environment	Indoor use and altitudes up to 2000 m
Specifications assured range	Temperature 5°C to 35°C Humidity 20% to 80% R.H. (with no dew condensation)
Operating range	Temperature 0°C to 40°C Humidity 20% to 80% R.H. (with no dew condensation)
Storage range	Temperature -40°C to 70°C Humidity 90% or less R.H. (with no dew condensation)

[AC input]

Nominal input rating	220 Vac, 50 Hz or 60 Hz
Input voltage range	200 V to 240 Vac
Power consumption	At no-load (in READY state): 50 VA or less At rated load: 45 VA maximum
[Insulation resistance]	AC INPUT to chassis 30 MΩ or more (at 500 Vdc)
[Withstand voltage]	AC INPUT to chassis 10 mA or less when 1390 Vac is applied for 2 seconds
[Grounding continuity]	25 Aac / 0.1 Ω or less
[Dimensions (largest section)]	160 (170) W × 132 (155) H × 230 (270) D mm
[Weight]	Approx. 6 kg
[Accessories]	High-voltage test leads TL01C-TOS (approx. 1.5 m): 1 set / Power cord: 1 / INTERLOCK jumper: 1 / Operation Manual: 1 copy

OPTIONS FOR ELECTRICAL SAFETY TESTERS

注意 1: 选购件的面板标示文字和使用说明书为英文。
注意 2: 有★符号的产品由日本菊水电子工业株式会社制造。

Note 1: The panel labels and operation manuals of the optional products are in English.
Note 2: The products marked ★ are manufactured by KIKUSUI Electronic Corp. of Japan.

用于安全测试仪器的选购件

Remote control box

■ 远程控制箱

● RC01C-TOS

用于单手操作的 One-handed operation
尺寸 Dimensions: 200W×70H×39Dmm
※附属电缆长度 Accessory cable length: 1.5m



High-voltage test Lead

■ 高电压测试引线

● TL01C-TOS

电缆长度 Cable length: 1.5m
最大使用电压 Maximum operating voltage: 5kV



Warning light unit

■ 警告灯单元

● PL02-TOS ★

根据 TOS8830C 背面的 AC/DC24V 信号进行 ON / OFF 控制。
The light is turned on and off by the 24-V AC/DC signal fed from the rear side of TOS8830C.



● RC02C-TOS

用于两手操作的 Double-handed operation
尺寸 Dimensions: 330W×70H×39Dmm
※附属电缆长度 Accessory cable length: 1.5m



● TL02C-TOS

电缆长度 Cable length: 3m
最大使用电压 Maximum operating voltage: 5kV



High-voltage test probe (pistol type)

■ 高电压测试探针 (手枪型)

● HP01AC-TOS

电缆长度 Cable length: 1.8 m
最大使用电压 Maximum operating voltage:
4 kV DC 5 kV

● HP02AC-TOS

电缆长度 Cable length: 3.5 m
最大使用电压 Maximum operating voltage:
4 kV DC 5 kV



(相关产品介绍) 菊水电子工业 TOS 系列
(Information about Related Products) KIKUSUI Electronic Corp. TOS Series

高质量品牌 “KIKUSUI” 的安全测试仪器 !!
Electrical safety tester developed under the quality brand of KIKUSUI !!

Withstanding Voltage & Insulation Tester
耐压 / 绝缘电阻测试仪
TOS9200 Series



Withstanding Voltage & Insulation Tester
耐压 / 绝缘电阻测试仪
TOS8870A



Withstanding Voltage Tester
耐压测试仪
TOS5000(A) Series



Earth Continuity Tester
地线导通测试仪
TOS6200 Series



Insulation Tester
绝缘电阻测试仪
TOS7200



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