

## 5288a

# Mobile Resonating Inductor 40 kVA, 12 kV

### Datasheet







### **General Description**

The 5288a is a manual tunable 12 kV, 40 kVA inductor, to be used with the MIDAS 2881 system to address higher DUT capacitance, typically used on large rotating machines or other high capacitive load while testing on-site.

The variable inductor is connected in parallel with the capacitive test object CX forming a parallel resonant circuit. By adjusting the inductance the resonant point can be reached. At this resonance point the inductor

compensates the reactive power required by the DUT capacitance and only the small portion of real power (ohmic losses) is needed to be fed by the Midas 2881.

This arrangement enables measurement of capacitances up to 1.06  $\mu f$  at 10 kV and up to 875 nF at 12 kV.

#### **Features**

- Max. Operating Voltage 12 kV rams (50 Hz/60 Hz)
- Frequency 50/60 Hz
- Output Power up to 40 kVA
- Inductance range (typical) 9.7 H.. 250 H
- Reduced PD level (< 500pC)</li>

### **Applications**

Combined with MIDAS 2881 it can be used for.

- Measuring power factor (capacitance and  $tan \delta$ ) of rotating machines on site
- Measuring partial discharges of large rotating machines on site (requires DDX9121b and 9230)

### Scope of Supply

- 5288a resonating inductor
- Cable set (3 m) for complete installation together with MIDAS 2881 system
- Operating Manual

### **Technical Data**

Measurement			
Max. Operating Voltage	12 kV rms (50 Hz / 60 Hz)		
Frequency	50 / 60 Hz		
Max. Output Current	3.30 A @ 50 Hz		
Max. Output Power	40 kVA		
Load tuning range (1)	48 nF 1.06 μF @ 50 Hz		
	44 nF 884 nF @ 60 Hz		
Load tuning range (2)	48 nF 875 nF @ 50 Hz		
	44 nF 729 nF @ 60 Hz		
PD level	< 500 pC		
Duty cycle at full load	15 min ON / 1h OFF at rated output power. 1h ON / 1h OFF at 50% rated power.		

<sup>(1)</sup>Values for 10 kV

<sup>&</sup>lt;sup>(2)</sup>Values for 12 kV

Environmental	
Operating temperature	+5 °C +50 °C
Storage temperature	-20 °C +70 °C
Humidity	5 95 % r.h.

Mechanical Section 1997 (1997)				
Dimensions (W x D x H)	580 x 480 x 840 mm	(23 x 19 x 33 in)		
Weight	135 kg (297 lb)			

### **Global Presence**

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