## **Field Sales Information**

For internal use only

# **VARIMETER IMD**

### Insulation monitor RN 5897/010



The RN 5897/010 insulation monitor in the VARIMETER IMD series is suited for IT systems in accordance with IEC/EN 61557-8. It may universally be applied in AC, 3(N)AC, AC/DC and DC systems and can even be used in control circuits as well as in main circuits. Voltage at the inputs in relation to PE may reach AC/DC 300 V (400 V networks measured at the neutral point) with a line capacitance of up to 1000  $\mu$ F. Monitoring voltage-free systems is also possible. For higher voltages of up to AC 760V / DC 1000 V, the RP 5898 ballast unit may be connected.

Our previous insulation monitor solely for AC systems make sense if only using alternating current for the connected users. Today, however, regulated drives and users with switched power supplies have become the standard (e.g., PCs, electronic ballast units) These users have the disadvantages of harmonics and possible direct current effects caused by switched power supplies. Owing to the measuring principle, external direct current and measuring voltage can overlay the AC insulation monitor. This creates false signals or can even lead to the absence of signals.

Our new RN 5897/010 insulation monitors for AC/DC systems eliminate the influences of insulation measuring through external direct current and line capacitance and are therefore perfectly suited for use in today's industrial grids.



E. DOLD & SÖHNE KG Postfach 1251 • D-78114 Furtwangen Telephone 07723 6540 • Fax 07723 654356 dold-relays@dold.com Unsere Erfahrung. Ihre Sicherheit

# VARIMETER IMD

### Insulation monitor RN 5897/010

#### **Applications:**

- AC/DC main circuits with directly connected direct current components such as current converters, inverters and regulated drives
- UPS systems, battery networks
- Heating devices with phase angle control
- Facilities with switched power supplies
- IT systems with high capacitance

#### **Target Sectors**

- Machine building
- Engineering and planning offices
- Ship-building and marine technology

#### **Advantages and Customer Benefit**

- Preventative fire and facility protection
- Recognition of symmetric and unsymmetric insulation errors
- Rapid error localization through selective earth fault detection for L+ and L-
- Universally applicable in non-earthed DC / AC and mixed IT networks up to AC 760V / DC 1000V of nominal voltage
- Easy to set response values and setting parameters with a rotational switch and menu operations
- For line capacitance of up to 1000 μF
- Measuring circuit monitoring L(+)/L(-) on broken wires
- Protection conductor connection monitoring PE1/PE2 on broken wires



## **Field Sales Information**

For internal use only

# **VARIMETER IMD**

Insulation monitor RN 5897/010



### **Competitor Comparison**

Competitor overview: insulation monitor for RN 5897 mixed phase	Bender isoEV425	Bender AGH420 Ballast unit	Dold RN5897/010	Dold RP5898 Ballast unit
Supply voltage	AC100240V		AC/DC2480V	
	DC24240V		AC/DC80230V	
	each 47…63Hz		DC1224V	
			each AC 50/60 Hz	
Nominal supply voltage	AC0690V,		AC0690V,	
	DC01000V		DC01000V	
	with AGH420		with RP5898	
Measuring range I	2500kΩ		1250kΩ	
Capacitance	5µF		1000µF	
Indicator	Display		Display	
Width	36 mm		52.5 mm	
Approvals	UL		none	

.

.

Please find the data sheet attached.

.

For further information, please contact headquarter.

.

Attached: Data sheet / Flyer RN 5897