DEIF A/S — Type certificate

4124010046A

Type:	**Insulation monitor type DIM-Q**

	Technical specifications	
	Measuring circuit:	
	DC resistance (R_i):	300 kΩ ±1%
	AC impedance (Z_i)	251 kΩ ±1%
*	Measuring voltage:	±43 VDC ±5%
	Mains voltage:	Max. 690 VAC
	Instrument:	
*	Measuring range:	1 MΩ / 10 MΩ
*	Accuracy:	±5% of scale lenght at 1 MΩ. ±2% of scale lenght at 10 MΩ
	Temperature drift:	Max. 0.5% of scale length per 10 °C
	Aux. supply influence:	Max. 0.2% of scale length when U_{AUX} changes from 120-85% Max. 5.0% of scale length in the range 85…120% U_{AUX}
*	Aux. supply:	Voltage: 100-110-127 VAC, 220-230-240 VAC or 400-450-480 VAC, ±20% Frequency: 30…70 Hz. Consumption: ≤4 VA
	Response time:	Depends on the actual insulation level and on the leakage capacitance
*	Visual indication:	Green LED: supervision. Red LEDs: fault.
	Relay output:	
*	Set point:	0…1000 kΩ at 22 kΩ scale centre. 0…10000 kΩ at 220 kΩ scale centre
	Repeatability:	±1% of scale length for potentiometer
	Hysteresis:	±1% of scale length for potentiometer
	Temperature drift:	Max. 0.2% of scale length for potentiometer per 10 °C
	Voltage drift:	Max. 0.2% of scale length for potentiometer at U_{AUX} ±20%
*	Relay output type:	Change-over contact
	Contact ratings:	AC1: 8 A, 250 VAC. AC15: 3 A, 250 VAC. DC1: 8 A, 24 VAC. DC13: 3 A, 24 VAC.
*	Relay coupling	Normally energized (NE) or normally de-energized (ND)

Type test specifications		*Tested according to:*
Insulation	>100 MΩ, tested at 500 VDC	IACS UR E10
Vibration:	3…13.2Hz: 3 mm 13.2-100Hz: 1.0 g	IACS UR E10
Shock:	6 impacts of 50 g, 11 ms half-sine Tested in each direction in all 3 axes	IEC 68-2-27, test: Ea
Climate:	Class HSE	DIN 40040
Protection:	Case: IP52/IP54 Terminals: IP20	IEC/EN 60529
Temperature:	-10…55 °C (nominal) -25…60 °C (operating) -25…65 °C (storage)	IACS UR E10
Galvanic separation:	Meas. input: 3.250 VAC Aux./supply input: 3.250 VAC Relay output: 2.200 VAC	EN 61010-1. Tested at 50 Hz, 1 min. Each circuit tested to other circuits and to protective earth.
Materials:	All plastic parts are self-extinguishing to UL94 (V1)	
EMC:	Immunity	SS4361503 - PL 4. EN 61000-1-1/2
	Emission	EN 61000-1-3/4. IACS UR E10 power distribution zone.

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