



GDF-5000/OL Online Insulation Monitoring Device for DC System



General Information

GDF-5000/OL Online Insulation Monitoring Device for DC System is used for real-time online monitoring of insulation status of DC bus and branch. This device adopts the detection method of DC balanced resistance. It does not produce any AC or DC interference signal to busbar, and will not cause the artificial insulation resistance drop. It is suitable for power plants and substations of any voltage level.

GDF-5000/OL's unique stability and anti-distributed capacitance make it more suitable for bus system under complex working conditions, standard instrument structure, compact size, convenient installation and better applicability.

GDF-5000/OL has LCD display, full software function control, perfect man-machine interface, easy operation and use.

Features

- Modular international standard industrial controller structure, standard shell, small size and light weight, easy installation and maintenance;
- Single/double bus up to 64 loop monitoring, DC balanced resistance detection method, no bus interference;
- Branch fast detection, inspection time is less than 20 seconds;
- The measured results are not related to bus distributed capacitance;
- Automatic/manual inspection of branches;
- The configuration of DC leakage current sensor is flexible and convenient.
- Isolated RS-485 communication interface, MODBUS/Emerson communication protocol is fully compatible;
- Industrial operating temperature range;

Specification

Parameters	Symbol	Test condition	Min.	Typical	Max.	Unit
Input voltage grade	V _{in}			24, 48, 110, 220		V
Input voltage range	V _f		80%V _{in}		140%V _{in}	V
Voltage measurement accuracy		V _{in} =V _f			±0.5%	
Bus resistance range	R _m	V _{in} =V _f	0		999	KΩ
Bus resistance accuracy					±5%	
Branch resistance range	R _z	V _{in} =V _f	0.0		100.0	KΩ
Branch resistance accuracy					±5%	
Branch numbers of each segment	N		0		64	
Rated power consumption	P _o			3		W
Operating temperature range	T _j		-10		50	°C
Alarm contact capacity	P _f	DC, no sense			220V 0.2A	