GARD

Unparalleled Protection

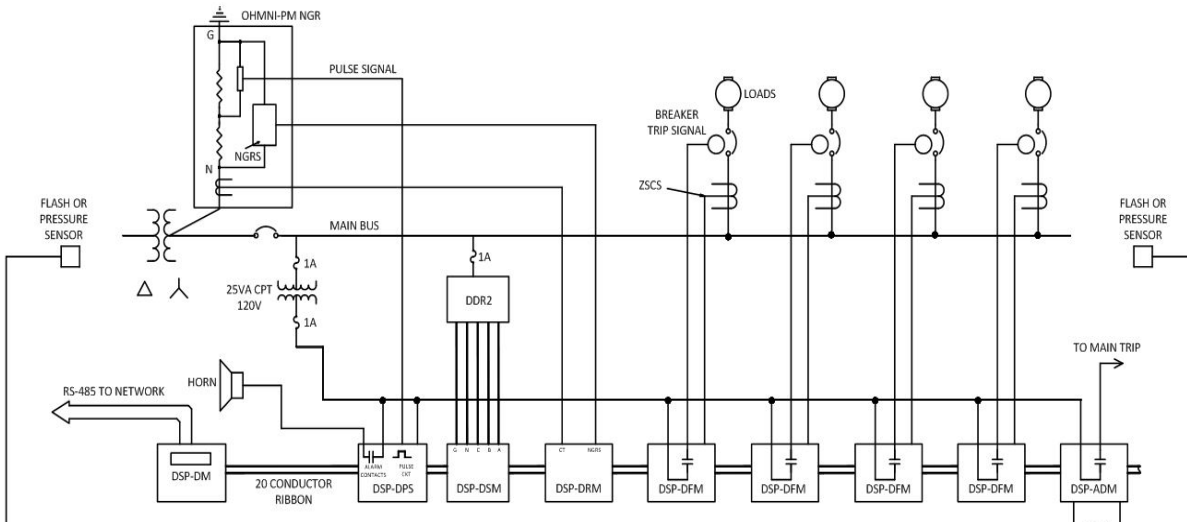
DSP-ADM

High Resistance Grounding has long been recognized and used as a technology to improve reliability, ensure process continuity even when there is a ground fault and to assist in fault location. Recently, High Resistance Grounding has been accepted as an arc flash reduction technology that reduces the likelihood of an arc flash occurring.

Until now the one continued concern with HRG technology was it does not lower incident energy levels. This concern has been eliminated with the DSP-ADM, the first arc detection module ready to be added to your HRG system.

The DSP-ADM continuously monitors 21 possible fault sources using a combination of fiber, optical sensors or pressure sensors and provides a trip signal to the main breaker in the event of an arc flash.

Figure 1: Wiring Diagram with ADM



TECHNICAL SPECIFICATIONS

Power Requirements	100-240V, 50/60 Hz or DC, 25 VA
Dielectric	Relay contacts to chassis1500 V rms for 1 minute alarm level Control terminals to chassis 1500 V rms for 1 minute alarm level IEC-60255-5
Trip Level Inhibit	25% of systems ground current
Contact Ratings	DSP-DFM: Trip Contacts- Form “C” SPDT 10 Amp., 240 V AC resistive DSP-DPS: Alarm Contacts- Form “C” SPDT 8 Amp., 240 V AC resistive DSP-ADM: Form “C” SPDT 10Amp., 240V AC, 8A, 240 V DC resistive IEC-60950
Performance	DSP-DFM: Pickup Accuracy: ±10% of system let-through current DSP-DSM: Alarm Level Accuracy: ±10% of I_G
Temperature Range	0^{O}C to 50^{O}C

DSP OHMNI FEATURES

DIN-rail parts	Compact mounting reduces space requirements.
Compact Feeder Modules DSP-DFM	Large systems up to 50 circuits / DSP-OHMNI with DSP-ADM can be accommodated.
Selectable MUTE ON/OFF Function	Allows alarm contact to be used for other applications.
Selectable Trip on 1st Fault or 2nd Fault Operation	Provides user the option of maximizing continuity of service (2nd fault trip) or minimizing fire/damage risk (1st fault trip). Both can be used on the same system.
0-99min Delay Setting on 1st Fault Trip	Allows time to locate fault and/or orderly shutdown of equipment.
10-90% Alarm Level Setting	User selected sensitivity in 10% increments, allows maximum sensitivity to be used while preventing nuisance alarms.
Switching Modules DSP-CAS	Provides co-ordination between systems either vertically (between zones) or horizontally (same zone) on multi-zone or main-tie-main systems.
NGR Monitor DSP-DRM	Monitors the status of grounding resistor in one DSP-OHMNI compatible unit.
Password Protected Setup	Four digit codes selectable by user prevent unauthorized setup changes while still allowing self-test and read-only data.
Self-Test of Modules	Internal self-test of DSP-DFM, DSP-DSM verifies connections to provide assurance of functionality.
MODBUS Communications	Allows the operator to remotely monitor which feeder has faulted as well as the leakage currents of all feeders for trending purposes.

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