

Multilin DGPR

Integrated Solution for Retrofit of the Multilin DGP Generator Protection Relay

GE's Multilin™ DGPR is a fully integrated retrofit solution for the legacy Multilin Generator Protection DGP Relay. The Multilin DGPR solution is a one-to-one replacement of a DGP relay with a G60-based retrofit unit. The Multilin DGPR is well suited for large hydro, gas and steam turbine generators, providing state-of-the-art, modern protection and control functionality for these critical power system assets.

Application: Power Plant Retrofits and Upgrades

The Multilin DGPR is a secure, state-of-the-art solution for retrofit and modernization of existing protection and control systems for large hydro, gas or steam-based generating assets.

Key Benefits

- Secure, high-speed protection elements for complete generator protection, compliant with IEEE® C37.102
- Complete IEC® 61850 Process Bus solution providing resource optimization and minimizing total protection and control life cycle costs
- Advanced fault and disturbance recording, including internal relay operating signals replacing external recording devices
- Robust network security enabling Critical Infrastructure Protection through user command logging, and dual permission access control
- Advanced automation capabilities for providing customized protection and control
- Phasor measurement unit with synchronized phasor information according to IEEE C37.118 standard
- Ethernet Global Data (EGD) eases integration with Multilin control systems
- Reduced relay-to-relay wiring and associated installation costs through high-speed inter-relay communications
- Ambient temperature monitoring and alarms
- Graphical Logic Designer and Logic Monitor to simplify designing and testing procedures via the Multilin EnerVista™ UR Engineer
- Service and update notification toolset ensures device documents and software are up-to-date via EnerVista Launchpad
- EnerVista Integrator providing easy integration of data in the G60 into new or existing monitoring and control systems



Fully Integrated Modular Solution

- Predesigned, modular solution for ease of installation and testing in an existing Generator Protection Panel (GPP)
- Reduced operations and maintenance cost by using the modular panel design and multi-functional components
- Factory tested and verified to help expedite field testing and commissioning

Scalability and Flexibility

- Provides the protection and control functions required for large generators in one relay platform
- Supplied pre-wired to match existing terminal blocks in the GPP

Functionality and Reliability

- Based on GE's advanced G60 relay with embedded functionality and interoperability, reducing the need for multiple devices to achieve full DGP functionality
- Supports multiple communication protocols to interface with modern and legacy communication systems and devices
- Built-in compliance to cyber security standards and regulatory requirements

Total Quality Solution

- Designed, assembled, wired and tested under high quality assurance and quality control standards
- Each DGPR Solution is provided with complete documentation with as-built drawings, wiring tables for ease of site installation and testing





Front View

The Multilin DGRP solution features:

- Multilin G60 Advanced Generator Protection Relay (G60-UA4-HKH-F8M-H6P-M8M-P6M-U6C-WRH)
- Five test switches for CT, VT, Trip, and DC circuit isolation
- Gauge 11 metal plate to mount G60 relay and test switches
- Integrated wiring to connect relay through the FT test switches and back of the module
- Self-contained wiring between G60, FT switches and terminal blocks at the back of the module, to connect existing GPP wiring
- Installation documentation to assist with mounting in a GPP panel
- Internal wiring and interconnection diagram
- G60 relay settings, based on DGP settings (optional)



Rear View

Order Code

DGPR	*	**	**	**	**	***	****	****	****	****	****	Description
DGPR	S											Standard with G60
	C											Custom with G60 order code specified
21/78 (LPS-O) Integration		D0										None
		D1										3 RU cover plate for LPS-O
50RE Integration			RE0									None
			RE1									Cover plate for 50RE relay
50/62BF Integration				BF0								None
				BF1								Cover plate for 50/62 BF relay
DGP to G60 Setting conversion					GS0							None
					GS1							DGPR settings required, converted from original DGP settings
21/78 to G60 Setting conversion						DS0						None
						DS1						21/78 as installed settings to be integrated with G60 settings
50RE to G60 Setting conversion							RES0					None
							RES1					50RE as installed settings to be integrated with G60 settings
50/62BF to G60 Setting conversion								BFS0				None
								BFS1				50/62 BF as installed settings to be integrated with G60 settings
GPP Drawing update									DWG0			None
									DWG1			Generator protection panel (GPP) and layout drawings update for DGPR replacement
GPM-S Option										GPM0		None
										GPM1		GPM-S (GPMSG + GPMSB + 204-SD-43737 CT) to be included as ship loose items
64S Settings											64S0	None
											64S1	64S settings to be integrated with G60 settings

GE

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