



1.7 239 relays

Installed Relay	Retrofit Relay
239 Motor Protection Relay 	339 Motor Protection System 

239 features are available in 339 relays as described in the table below:

Feature	239 ¹	339 ²
Protection & Control	Undercurrent/minimum load: 37 Motor/load bearing, Overtemperature: 38 Mechanical jam:39 Current unbalance: 46 Stator winding overtemperature: 49 Phase short circuit: 50 Timed overload: 51 Ground fault instantaneous or definite time: 50G/50N Alarm relay: 74 Lockout and trip relay: 86/94	Undercurrent: 37 Current Unbalance: 46 Acceleration Time: 48 Thermal Protection: 49 IOC: 50G/SG(1), 50L, 50N(1), 50P(1) TOC: 51N(1), 51P(1), 51R Other Protection: 66, 86, 50BF
Monitoring & Metering	Metering Event Recording	Metering Event Recording
Communications	RS485 port	USB Serial (RS485) protocols: Modbus RTU, DNP 3.0, IEC 60870-5-103 Ethernet protocols: Modbus TCP/IP, DNP 3.0, IEC 60870-5-104, IEC 61850 GOOSE, IEC 61850
Hardware	2 inputs and 3 fixed inputs. 4 Form C contacts 6 Fixed LEDs	10 inputs 7 outputs (2 Form A, 5 Form C) Configurable I/O Configurable Logic 8 configurable and 4 fixed LEDs 10 fixed LED (drawout unit) 12 fixed LEDs (non-drawout unit)

1. The 239 relay with MOD 509 is designed to provide ground directional protection. Similar protection can be obtained using the 339 relay neutral instantaneous protection using either the current, voltage, or both.
2. For additional features, refer to the 339 *Instruction Manual*.

The following table describes 239 options, and the equivalent 339 options and order codes. In some cases the 339 options have changed from those available for 239 relays, so read the descriptions carefully.



Order codes are subject to change without notice. See the GE Multilin website at: <http://www.gegridsolutions.com/multilin> for up-to-date order codes.

Feature	239 order code options	339 order code options
Application	239RTD-AN-H AN: Single isolated, analog output: 0 – 1, 0 – 20, 4 – 20 mA Programmable output parameters: thermal capacity, % full load, phase current, RTD1, RTD2, RTD3 temperature	339EP0GOHE-S-NNSNNH S: Standard configuration: 37, 46, 48, 49, 50P(1), 50G/SG(1), 50N(1), 50L, 51R, 66, 86, 51N(1), 51P(1), 50BF
Phase CT Range	239 standard phase CT Input: 1 A and 5 A secondary Range: 0.1 to 11 x phase CT primary	339E-PO-GOHESNNSNNH PO: user selectable 1/5 A three-phase current inputs (0.02 - 20 x CT)
Ground CT Range	239 standard ground CT input: 5 A secondary and 50:0.025 Range: 0.03 to 1.4 x CT primary (5 A CT) 0.05 to 16.0 A (50:0.025 CT)	339EP0-G0-HESNNSNNH G0: user selectable 1/5 A Ground current input (0.02 - 20 x CT) All 339 relays come with CBCT (50:0.025) standard.
Power Supply	239 standard power supply: 90 – 300 VDC or 70 – 265 VAC, 50 / 60 Hz	339EP1G1-H-ESNNSNNH H: 110 - 250 VDC 110 - 230 VAC L: 28 - 48 VDC
Harsh Environment	239RTDAN-H H: Harsh Environment Conformal Coating	339EP1G1HESNNSNN-H H: Harsh Environment Conformal Coating
RTDs	239-RTD-ANH 3 RTDs: stator/bearing; programmable type: platinum, nickel, copper	The 339 can support 3 - 100 ohm Pt RTDs. The RMIO module supports up to 12 - 100 ohm Pt RTDs.