

High Horsepower Modular Design



800A, 460V
Shown with Circuit Breaker

G5HHP AC Drive, 350 - 1750 HP

G5HHP is a high horsepower AC drive. The drive is of modular design with separate converter and inverter sections installed in a common enclosure. These sections can be paralleled to increase capacity to 1600 amps at 460 and 600 volts.

Utilizing this modular approach, the drive offers a commonality of parts throughout the 400 to 1,600 amp ratings, facilitating the construction of a drive to meet customer application needs in 400 amp increments. The desired power level is achieved simply by adding converter modules and 400 amp inverter modules in parallel. Slide-rail construction techniques permit easy access for maintenance, removal or replacement.

The G5HHP features a standard non-regenerative front end and can easily support a 12-pulse, 18-pulse, or a 24-pulse configuration for reduced harmonics. A regenerative front end is available as an option, which will meet IEEE-519 harmonic specifications. Other power-related options are available which include circuit breakers, line reactors and filters.

The drive provides increased versatility in installations of up to 1,750 horsepower, including pumps and fans, chillers, pulp and paper manufacturing, mining industry conveyors, rock crushers and extruders.

The drive incorporates three control modes in one product; traditional V/Hz, open loop vector, and closed loop flux vector.

The G5HHP is equipped with a serial port utilizing standard Modbus protocol. Drive interfaces access all parameters, diagnostics, and operational commands. Optional interface boards provide a wide range of control, monitoring, and diagnostic communication capabilities for integration from plant floor to supervisory level systems.

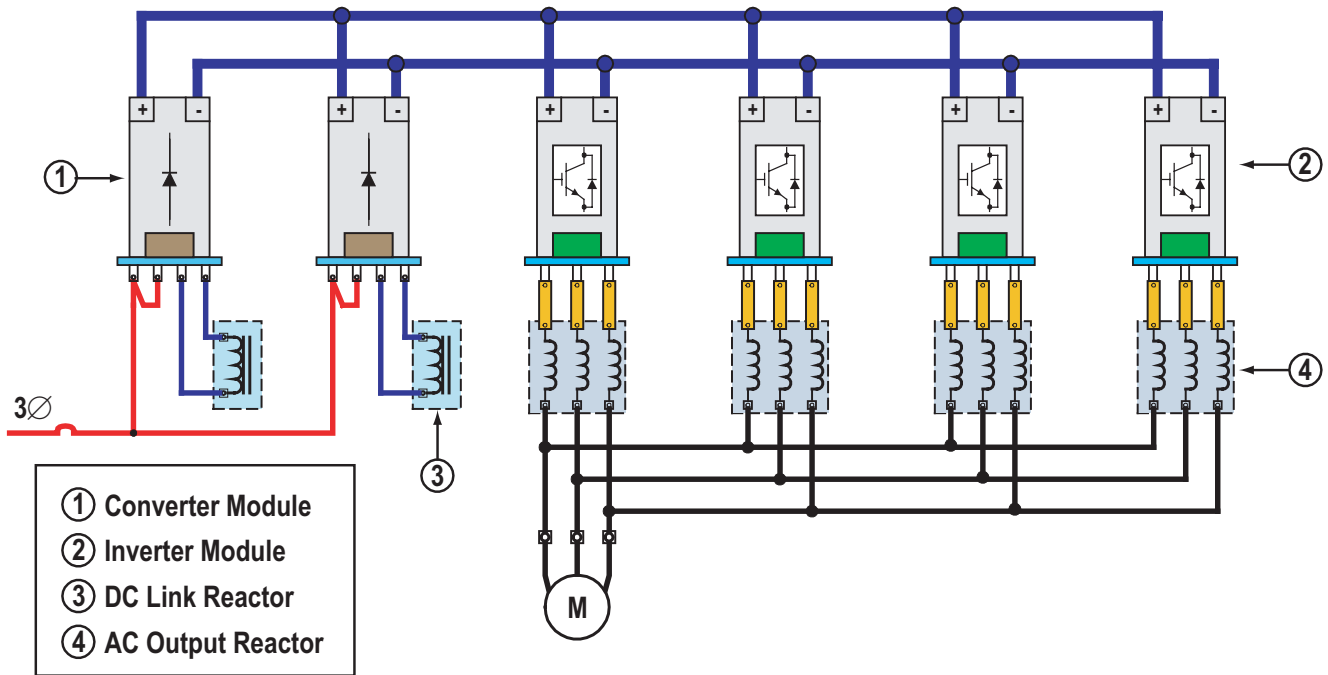
As a solutions provider, Yaskawa supports and encourages the industry's demand for open architecture and open connectivity. The G5HHP drive can communicate via all of the popular communication protocols such as DeviceNet, Modbus, Profibus, and others.

DriveWizard™, an easy to use software tool, enables the user to upload, download, and monitor drive parameters.

CASE™ software (optional) can add functionality to the drive by reconfiguring drive defaults, establishing presets for OEM equipment, and by eliminating peripheral controls and PLCs. CASE application-specific software can be easily flashed to the on-board ROM.

NEMA 12 FVFF is the standard enclosure style. Other enclosure types are available.

Modular Power Components Configuration



Standard Specifications

Voltage Class	400 V Class				600 V Class			
Model G5HHPB _ _ _ _	B0400	B0800	B1200	B1600	C0400	C0800	C1200	C1600
Current Output (Amps)	414	800	1200	1600	414	800	1200	1600
CT ⁽¹⁾	450	900	1350	1800	450	900	1350	1800
VT ⁽²⁾	350	700	1000	1250	400	800	1250	1500
HP (3)	400	800	1000	1500	450	900	1250	1750
Rated Input Voltage and Frequency	380/400/415/440/460 V, 50/60 Hz				500/525/575/600 V, 50/60 Hz			
Output Frequency	Up to 120 Hz				Up to 120 Hz			
Parallel Inverter Modules (quantity)	1	2	3	4	1	2	3	4

(1) CT= Constant Torque 150% overload for 60 sec

(2) VT= Variable Torque 120% overload for 60 sec

(3) HP ratings are based on NEMA 4-pole motor data. When sizing a drive to match the motor, use the drive output current rating.

Other Products



V7 Drive General purpose, V/Hz, or open loop vector, microsize, 1/8 - 10 HP. *Flyer FL.V7.01*



P7 Drive Industrial Fan/Pump, V/f, Normal Duty, 5 - 500 HP. *Flyer FL.P7.01*



F7 Drive Industrial Workhorse, Normal and Heavy Duty, 1/2 - 500 HP. *Flyer FL.F7.01*



G7 Drive Ultimate Performance Solution 3 Level Inverter, 1/8 - 500 HP. *Flyer FL.G7.01*



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G5HHP Drive