GS2 Series - Introduction

GS2 Series Drives									
Motor Rating	Hp	.25	.5	1	2	3	5	7.5	10
	kW	0.2	0.4	0.75	1.5	2.2	3.7	5.5	7.5
Single-Phase 115 Volt Class		✔	✔	✔					
Single/Three-Phase 230 Volt Class			✔	✔	✔	✔			
Three-Phase 230 Volt Class						✔	✔	✔	
Three-Phase 460 Volt Class				✔	✔	✔	✔	✔	✔
Three-Phase 575 Volt Class				✔	✔	✔	✔	✔	✔

Overview

The GS2 series of AC drives offers all of the features of our GS1 drive plus dynamic braking, PID and a removable keypad. The drive can be configured using the built-in digital keypad or with the standard RS-232/RS-485 serial communications port. The standard keypad allows you to configure the drive, set the speed, start and stop the drive, command forward and reverse direction of motor shaft, and monitor specific parameters during operation. Each GS2 features one analog and six programmable digital inputs, and one analog and two programmable relay outputs.

Features

- Simple Volts/Hertz control
- Sinusoidal Pulse Width Modulation (PWM)
- 1-12 kHz carrier frequency
- IGBT technology
- Starting torque: 125% at 0.5 Hz/150% at 5 Hz
- 150% rated current for one minute
- Electronic overload protection
- Stall prevention
- Adjustable accel and decel ramps
- S-curve settings for acceleration and deceleration
- Automatic torque compensation
- Automatic slip compensation
- Dynamic braking circuit
- DC braking
- Three skip frequencies
- Trip history
- Programmable jog speed
- Integral PID control
- Removable keypad with speed potentiometer
- Programmable analog input
- Programmable analog output
- Six programmable digital inputs
- Two programmable relay outputs
- RS-232/485 Modbus communications up to 38.4 Kbps.
- Optional Ethernet communications
- UL/cUL/CE* listed
  * GS2-5xxx 575V drives NOT CE compliant

Accessories

- AC line reactors
- EMI filters
- RF filters
- Braking resistors
- Fuse kits and replacement fuses
- Ethernet interface
- Replacement keypads
- Keypad cables in 1, 3, and 5 meter lengths
- Four and eight-port serial communication breakout boards
- KEP***Direct*** I/O Server
- GSoft drive configuration software

Detailed descriptions and specifications for the accessories are available in the "GS/DURAPULSE Accessories" section.

Typical Applications

- Conveyors
- Fans
- Pumps
- Compressors
- HVAC
- Material handling
- Mixing
- Shop tools

GS2 series part numbering system

GS2- 4 7P5

Applicable Motor Capacity

0P2: 0.25HP	0P5: 0.5HP
1P0: 1.0HP	2P0: 2.0HP
3P0: 3.0HP	5P0: 5.0HP
7P5: 7.5HP	010: 10HP

Input Voltage

1: 100-120VAC
2: 200-240VAC
4: 380-480VAC
5: 500-600VAC

Series Name

GS2 Series Specifications

115V CLASS GS2 SERIES				
Model		GS2-10P2	GS2-10P5	GS2-11P0
Price		<--->	<--->	<--->
Motor Rating	**HP**	1/4hp	1/2hp	1hp
	kW	0.2kW	0.4kW	0.75kW
Rated Output Capacity (kVA)		0.6	1.0	1.6
Rated Input Voltage		Single-phase : 100 to 120 VAC ±10% 50/60 Hz ±5%		
Rated Output Voltage		Three-phase, two times proportion to input voltage		
Rated Input Current (A)		6	9	16
Rated Output Current (A)		1.6	2.5	4.2
DC Braking		Frequency 60-0 Hz, 0-100% rated current, start time 0.0-5.0 seconds, Stop Time 0.0-25.0 seconds		
Protective Structure		Protected chassis IP20		
Ambient Operating Temperature		-10°C to 50°C (14°F to 122°F) without derating		
Storage Temperature		-20° to 60°C (-4° to 140°F) during short term transportation period		
Humidity		20 to 90% Humidity (no condensation)		
Vibration		9.8 m/s^2 (1G) at less than 10 Hz; 5.9 m/s^2 (0.6G) 10 to 60 Hz		
Location		Altitude 1,000m or less, Keep from corrosive gases liquids or dust		
Watt Loss @ 100% I (W)		24	34	46
Weight: (lb)		3.5	3.6	3.7
Dimensions* (HxWxD) mm(in)**		151.0 x 100.0 x 140.5. (5.94 x 3.94 x 5.53)		
Accessories				
Line Reactor	**Input side of drive (1 Phase)***	GS-10P2-LR	GS-10P5-LR	GS-11P0-LR
	Output side of drive (3 Phase)*	GS-20P5-LR-3PH	GS-20P5-LR-3PH	GS-21P0-LR-3PH
Braking Resistor		GS-20P5-BR	GS-20P5-BR	GS-21P0-BR
EMI Filter		20DRT1W3S		
Fuse Kit	**Single Phase****	GS-10P2-FKIT-1P	GS-10P5-FKIT-1P	GS-11P0-FKIT-1P
Replacement Fuses	**Single Phase****	GS-10P2-FUSE-1P	GS-10P5-FUSE-1P	GS-11P0-FUSE-1P
Spare Keypad, GS2 Series Drive		GS2-KPD		
Keypad Cable, GS2 Series, 1 meter		GS-CBL2-1L		
Keypad Cable, GS2 Series, 3 meter		GS-CBL2-3L		
Keypad Cable, GS2 Series, 5 meter		GS-CBL2-5L		
Ethernet Communications module for GS2 Series Drives (DIN rail mounted)		GS-EDRV		
Four port RS-485 multi-drop termination board		GS-RS485-4		
Eight port RS-485 multi-drop termination board		GS-RS485-8		
Software		GSoft / KEP*Direct*		
OPC Server		KEP*Direct*		

Note: GS2-1xxx drives require 115V class input line reactors and 230V class output line reactors.

****Note: Single phase fuse kits and fuses are used only with GS2-1xxx drives.***

*****Note: Height dimension does not include external ground terminal, which adds 10 to 15 mm. Refer to dimensional drawings for details.***

GS2 Series Specifications

230V CLASS GS2 SERIES							
Model		GS2-20P5	GS2-21P0	GS2-22P0	GS2-23P0	GS2-25P0	GS2-27P5
Price		<--->	<--->	<--->	<--->	<--->	<--->
Motor Rating	***HP***	1/2hp	1hp	2hp	3hp	5hp	7.5hp
	kW	0.4kW	0.75kW	1.5kW	2.2kW	3.7kW	5.5kW
Rated Output Capacity (kVA)		1.0	1.9	2.7	3.8	6.5	9.5
Rated Input Voltage		Single/Three-phase : 200/208/220/230/240 VAC ±10%, 50/6 0Hz ±5%				Three-phase : 200/208/220/230/240 VAC ±10%, 50/60 Hz ±5%	
Rated Output Voltage		Three-phase : Corresponds to input voltage					
Rated Input Current (A)		6.3/2.9	11.5/6.3	15.7/8.8	27.0/12.5	19.6	28
Rated Output Current (A)		2.5	5.0	7.0	10	17	25
DC Braking		Frequency 60-0 Hz, 0-100% rated current, start time 0.0-5.0 seconds, Stop Time 0.0-25.0 seconds					
Protective Structure		Protected chassis IP20					
Ambient Operating Temperature		-10°C to 50°C (14°F to 122°F) without derating					-10°C to 40°C (14°F to 104°F) without derating
Storage Temperature		-20° to 60°C (-4° to 140°F) during short term transportation period					
Humidity		20 to 90% Humidity (no condensation)					
Vibration		9.8 m/s^2 (1G) at less than 10 Hz; 5.9 m/s^2 (0.6G) 10 to 60 Hz					
Location		Altitude 1,000m or less, Keep from corrosive gases liquids or dust					
Watt Loss @ 100% I (W)		34	57	77	111	185	255
Weight: (lb)		3.5	3.6	3.7	8.5	8.5	8.5
Dimensions* (HxWxD) mm (in)		151.0 x 100.0 x 140.5. (5.94 x 3.94 x 5.53)			220.0 x 125.0 x 189.5 (8.66 x 4.92 x 7.46)		
Accessories							
Line Reactor	***Single-Phase***	GS-20P5-LR-1PH	GS-21P0-LR-1PH	GS-22P0-LR-1PH	GS-23P0-LR-1PH	N/A	N/A
	Three-Phase	GS-20P5-LR-3PH	GS-21P0-LR-3PH	GS-22P0-LR-3PH	GS-23P0-LR-3PH	GS-25P0-LR	GS-27P5-LR
Braking Resistor		GS-20P5-BR	GS-21P0-BR	GS-22P0-BR	GS-23P0-BR	GS-25P0-BR	GS-27P5-BR
EMI Filter (single phase input)		20DRT1W3S			32DRT1W3C	40TDS4W4B	
Fuse Kit	***Single-Phase***	GS-20P5-FKIT-1P	GS-21P0-FKIT-1P	GS-22P0-FKIT-1P	GS-23P0-FKIT-1P	N/A	N/A
	Three-Phase	GS-20P5-FKIT-3P	GS-21P0-FKIT-3P	GS-22P0-FKIT-3P	GS-23P0-FKIT-3P	GS-25P0-FKIT-3P	GS-27P5-FKIT
Replacement Fuses	***Single-Phase***	GS-20P5-FUSE-1P	GS-21P0-FUSE-1P	GS-22P0-FUSE-1P	GS-23P0-FUSE-1P	N/A	N/A
	Three-Phase	GS-20P5-FUSE-3P	GS-21P0-FUSE-3P	GS-22P0-FUSE-3P	GS-23P0-FUSE-3P	GS-25P0-FUSE	GS-27P5-FUSE
Spare Keypad, GS2 Series Drive		GS2-KPD					
Keypad Cable, GS2 Series, 1 meter		GS-CBL2-1L					
Keypad Cable, GS2 Series, 3 meter		GS-CBL2-3L					
Keypad Cable, GS2 Series, 5 meter		GS-CBL2-5L					
Ethernet Communications module for GS2 Series Drives (DIN rail mounted)		GS-EDRV					
Four port RS-485 multi-drop terminaton board		GS-RS485-4					
Eight port RS-485 multi-drop terminaton board		GS-RS485-8					
Software		GSoft / KEP*Direct*					
OPC Server		KEP*Direct*					

****Note: Height dimension does not include external ground terminal, which adds 10 to 15 mm. Refer to dimensional drawings for details.***

GS2 Series Specifications

460V CLASS GS2 SERIES							
Model		GS2-41P0	GS2-42P0	GS2-43P0	GS2-45P0	GS2-47P5	GS2-4010
Price		<--->	<--->	<--->	<--->	<--->	<--->
Motor Rating	***HP***	1hp	2hp	3hp	5hp	7.5hp	10hp
	kW	0.8kW	1.5kW	2.2kW	4kW	5.5kW	7.5kW
Rated Output Capacity (kVA)		2.3	3.1	3.8	6.2	9.9	13.7
Rated Input Voltage		Three-phase: 380/400/415/440/460/480 VAC ±10%, 50/60 Hz ±5%					
Rated Output Voltage		Corresponds to input voltage					
Rated Input Current (A)		4.2	5.7	6.0	8.5	14	23
Rated Output Current (A)		3.0	4.0	5.0	8.2	13	18
DC Braking		Frequency 60-0 Hz, 0-100% rated current, Start Time 0.0-5.0 seconds, Stop Time 0.0-25.0 seconds					
Protective Structure		Protected chassis IP20					
Ambient Operating Temperature		-10°C to 50°C (14°F to122°F)				-10°C to 40°C(14°F to 104°F)	
Storage Temperature		-20°C to 60°C (-4°F to 140°F) during short term transportation period					
Humidity		20 to 90% Humidity (no condensation)					
Vibration		9.8 m/s² (1G) at less than 10Hz, 5.9 m/s² (0.6G)10 to 60 Hz					
Location		Altitude 1,000m or less, Keep from corrosive gases liquids or dust					
Watt Loss @ 100% I (W)		73	86	102	170	240	255
Weight: (lb)		3.5	3.6	3.7	8.5	8.5	8.5
Dimensions* (HxWxD) mm (in)		151.0 x 100.0 x 140.5. (5.94 x 3.94 x 5.53)			220.0 x 125.0 x 189.5 (8.66 x 4.92 x 7.46)		
Accessories							
Line Reactor		GS-41P0-LR	GS-42P0-LR	GS-43P0-LR	GS-45P0-LR	GS-47P5-LR	GS-4010-LR
Braking Resistor		GS-41P0-BR	GS-42P0-BR	GS-43P0-BR	GS-45P0-BR	GS-47P5-BR	GS-4010-BR
EMI Filter		11TDT1W4S			17TDT1W44		26TDT1W4B4
Fuse Kit		GS-41P0-FKIT	GS-42P0-FKIT	GS-43P0-FKIT	GS-45P0-FKIT	GS-47P5-FKIT	GS-4010-FKIT
Replacement Fuses		GS-41P0-FUSE	GS-42P0-FUSE	GS-43P0-FUSE	GS-45P0-FUSE	GS-47P5-FUSE	GS-4010-FUSE
Spare Keypad, GS2 Series Microdrive		GS2-KPD					
Keypad Cable, GS2 Series, 1 meter		GS-CBL2-1L					
Keypad Cable, GS2 Series, 3 meter		GS-CBL2-3L					
Keypad Cable, GS2 Series, 5 meter		GS-CBL2-5L					
Ethernet Communications Module for GS Series Drives (DIN rail mounted)		GS-EDRV					
Four port RS-485 multi-drop terminaton board		GS-RS485-4					
Eight port RS-485 multi-drop terminaton board		GS-RS485-8					
Software		GSoft / KEP*Direct*					
OPC Server		KEP*Direct*					

Note: Height dimension does not include external ground terminal, which adds 10 to 15 mm. Refer to dimensional drawings for details.

GS2 Series Specifications

575V CLASS GS2 SERIES							
Model		GS2-51P0	GS2-52P0	GS2-53P0	GS2-55P0	GS2-57P5	GS2-5010
Price		<--->	<--->	<--->	<--->	<--->	<--->
Motor Rating	***HP***	1hp	2hp	3hp	5hp	7.5hp	10hp
	kW	0.75kW	1.5kW	2.2kW	3.7kW	5.5kW	7.5kW
Rated Output Capacity (kVA)		1.7	3.0	4.2	6.6	9.9	12.2
Rated Input Voltage		Three-phase: 500 to 600 VAC -15/+10%, 50/60 Hz ±5%					
Rated Output Voltage		Corresponds to input voltage					
Rated Input Current (A)		2.4	4.2	5.9	7.0	10.5	12.9
Rated Output Current (A)		1.7	3.0	4.2	6.6	9.9	12.2
DC Braking		Frequency 60-0 Hz, 0-100% rated current, Start Time 0.0-5.0 seconds, Stop Time 0.0-25.0 seconds					
Protective Structure		Protected chassis IP20					
Ambient Operating Temperature		-10°C to 50°C (14°F to122°F)				-10°C to 40°C(14°F to 104°F)	
Storage Temperature		-20°C to 60°C (-4°F to 140°F) during short term transportation period					
Humidity		20 to 90% Humidity (no condensation)					
Vibration		9.8 m/s^2 (1G) at less than 10Hz, 5.9 m/s^2 (0.6G)10 to 60 Hz					
Location		Altitude 1,000m or less, Keep from corrosive gases liquids or dust					
Watt Loss @ 100% I (W)		30	58	83	132	191	211
Weight: (lb)		3.3	3.3	4.4	7.0	7.0	7.3
Dimensions* (HxWxD) mm (in)		151.0 x 100.0 x 140.5. (5.94 x 3.94 x 5.53)			220.0 x 125.0 x 189.5 (8.66 x 4.92 x 7.46)		
Accessories							
Line Reactor		GS-51P0-LR	GS-52P0-LR	GS-42P0-LR	GS-43P0-LR	GS-47P5-LR	
Braking Resistor		GS-42P0-BR		GS-42P0-BR x (2) in parallel			GS-4010-BR x (2) in series
EMI Filter		not available					
Fuse Block (Edison 3-pole part #)		BC6033PQ or CHCC3D or CHCC3DI					
Replacement Fuses (Edison Fuse part #)		HCLR6 (10 fuses per pack)	HCLR10 (10 fuses per pack)	HCLR15 (10 fuses per pack)		HCLR20 (10 fuses per pack)	HCLR30 (10 fuses per pack)
Spare Keypad, GS2 Series Microdrive		GS2-KPD					
Keypad Cable, GS2 Series, 1 meter		GS-CBL2-1L					
Keypad Cable, GS2 Series, 3 meter		GS-CBL2-3L					
Keypad Cable, GS2 Series, 5 meter		GS-CBL2-5L					
Ethernet Communications Module for GS Series Drives (DIN rail mounted)		GS-EDRV					
Four port RS-485 multi-drop terminaton board		GS-RS485-4					
Eight port RS-485 multi-drop terminaton board		GS-RS485-8					
Software		GSoft / KEP*Direct*					
OPC Server		KEP*Direct*					

****Note: Height dimension does not include external ground terminal, which adds 10 to 15 mm. Refer to dimensional drawings for details.***

GS2 Series — General Specifications

General Specifications			
Control Characteristics			
Control System			Sinusoidal Pulse Width Modulation, carrier frequency 1kHz - 12kHz
Output Frequency Resolution			0.1 Hz
Overload Capacity			150% of rated current for 1 minute
Torque Characteristics			Includes auto-torque boost, auto-slip compensation, starting torque 125% @ 0.5Hz/150% @ 5.0Hz
Braking Torque			20% without dynamic braking resistor, 125% with optional braking resistor
DC Braking			Operation frequency 60-0Hz, 0-100% rated current. Start time 0.0-5.0 seconds. Stop time 0.0-0 25.0 seconds
Acceleration/Deceleration Time			0.1 to 600 seconds (linear or non-linear acceleration/deceleration), second acceleration/deceleration available
Voltage/Frequency Pattern			V/F pattern adjustable. Settings available for Constant Torque - low and high starting torque, Variable Torque - low and high starting torque, and user configured
Stall Prevention Level			20 to 200% or rated current
Operation Specifications			
Inputs	***Frequency Setting***	Keypad	Setting by <UP> or <DOWN> buttons or potentiometer
		External Signal	Potentiometer - 3k to 5kΩ/2W, 0 to 10VDC (input impedance 10kΩ), 0 to 20mA / 4 to 20 mA (input impedance 250Ω), Multi-speed inputs 1 to 3, Serial Communication RS232 and RS485 (Modbus RTU)
	Operation Setting	Keypad	Setting by <RUN>, <STOP> buttons
		External Signal	Forward/Stop, Reverse/Stop (run/stop, fwd/rev), 3-wire control, Serial Communication RS232 and RS485 (Modbus RTU)
	Input Terminals	Digital	6 user-programmable: FWD/STOP, REV/STOP, RUN/STOP, REV/FWD, Run momentary (N.O.), STOP momentary (N.C.), External Fault (N.O./N.C.), External Reset, Multi-Speed Bit (1-3), Jog, External Base Block (N.O./N.C.), Second Accel/Decel Time, Speed Hold, Increase Speed, Decrease Speed, Reset Speed to Zero, PID Disable (N.O.), PID Disable (N.C.), Input Disable
		Analog	1 user-configurable, 0 to 10VDC (input impedance 10k Ω) or 0 to 20mA / 4 to 20mA (input impedance 250Ω), 10 bit resolution Frequency setpoint or PID process variable PV
Outputs	***Output Terminals***	Digital	2 user-programmable; Inverter Running, Inverter Fault, At Speed, Zero Speed, Above Desired Frequency, Below Desired Frequency, At Maximum Speed, Over Torque Detected, Above Desired Current, Below Desired Current, PID Deviation Alarm
		Analog	1 user-programmable: 0 to 10VDC (max load 2mA), 8 bit resolution frequency, current, process variable PV
	Operating Functions		Automatic voltage regulation, voltage/frequency characteristics selection, non-linear acceleration/deceleration, upper and lower frequency limiters, 7-stage speed operation, adjustable carrier frequency (1 to 12 kHz), PID control, skip frequencies, analog gain & bias adjustment, jog, electronic thermal relay, automatic torque boost, trip history, software protection
Protective Functions			Electronic Thermal, Overload Relay, Auto Restart after Fault, Momentary Power Loss, Reverse Operation Inhibit, Auto Voltage Regulation, Over-Voltage Trip Prevention, Auto Adjustable Accel/Decel, Over-Torque Detection Mode, Over-Torque Detection Level, Over-Torque Detection Time, Over-Current Stall Prevention during Acceleration, Over-Current Stall Prevention during Operation
Operator Interface	***Operator Devices***		8-key, 4-digit, 7-segment LED, 14 status LEDs, potentiometer
	Programming		Parameter values for setup and review, fault codes
	Status Display		Actual Operating Frequency, RPM, Scaled Frequency, Amps, % Load, Output Voltage, DC Bus Voltage, Process Variable, Set-point Frequency
	Key Functions		RUN, STOP/RESET, FWD/REV, PROGRAM, DISPLAY, <UP>, <DOWN>, ENTER
Environment	***Enclosure Rating***		Protected chassis, IP20
	Ambient Temperature		-10° to 50°C (14°F to 122°F) -10° to 40°C (14°F to 104°F) For models 7.5Hp (5.5kW) and higher
	Storage Temperature		-20° to 60 °C (-4°F to 140°F) - during short-term transportation period
	Ambient Humidity		20 to 90% RH (non-condensing)
	Vibration		9.8 m/s²(1G), less than 10Hz,. 5.9 m/s² (0.6G) 10 to 60 Hz
	Installation Location		Altitude 1000m or lower above sea level, keep from corrosive gas, liquid and dust
Options			Noise filter, input AC reactor, output AC reactor, cable for remote operator, programming software (GSOFT), Dynamic braking resistor, input fuses, ethernet interface (GS-EDRV), EMI filters

GS2 Specifications — Installation

Understanding the installation requirements for your GS2 drive will help to ensure that it operates within its environmental and electrical limits.

Note: Never use only this catalog for installation instructions or operation of equipment; refer to the user manual, GS2-M.

Environmental Specifications	
Protective Structure [1]	IP20
Ambient Operating Temperature [2]	-10 to 50°C (14°F to 122°F) - 10 to 40°C (14°F to 104°F) for models 7.5HP and higher
Storage Temperature [3]	-20 to 60°C (-4°F to 140°F)
Humidity	To 90% (no condensation)
Vibration [4]	5.9 m/s² (0.6g), 10 to 55 Hz
Location	Altitude 1,000 m or less, indoors (no corrosive gases or dust)

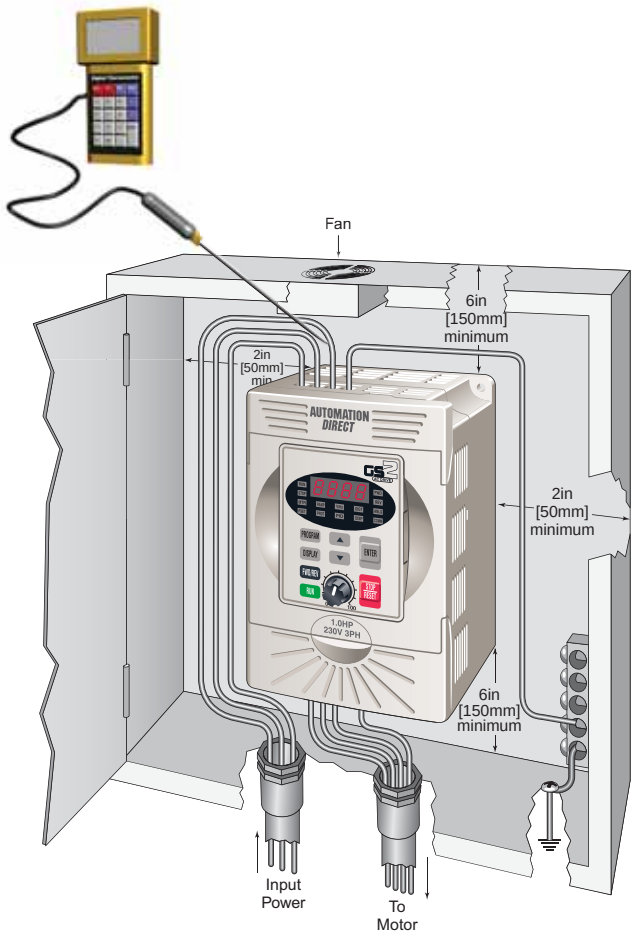
1: Protective structure is based upon EN60529

2: The ambient temperature must be in the range of -10° to 40° C. If the range will be up to 50° C, you will need to set the carrier frequency to 2.1 kHz or less and derate the output current to 80% or less. See our Web site for derating curves.

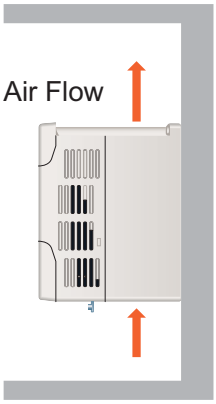
3: The storage temperature refers to the short-term temperature during transport.

4: Conforms to the test method specified in JIS CO911 (1984)

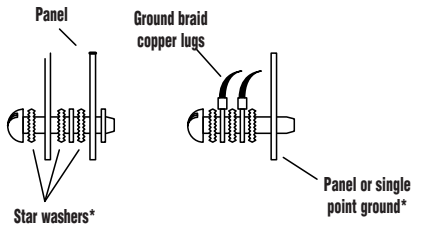
Watt-loss Chart	
GS2 Drive Model	***At full load***
GS2-10P2	24
GS2-10P5	34
GS2-11P0	46
GS2-20P5	34
GS2-21P0	57
GS2-22P0	77
GS2-23P0	111
GS2-25P0	185
GS2-27P5	255
GS2-41P0	73
GS2-42P0	86
GS2-43P0	102
GS2-45P0	170
GS2-47P5	240
GS2-4010	255
GS2-51P0	30
GS2-52P0	58
GS2-53P0	83
GS2-55P0	132
GS2-57P5	191
GS2-5010	211



Warning: Maximum ambient temperatures must not exceed 50°C (122°F), or 40°C (104°F) for models 7.5 hp (5.5 kW) and higher!



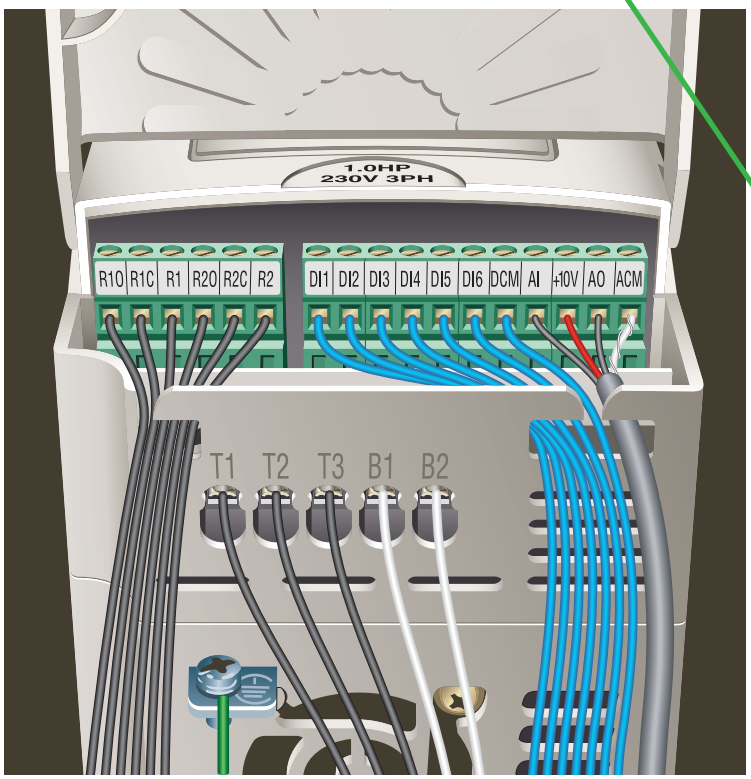
Warning: AC drives generate a large amount of heat which may damage the AC drive. Auxiliary cooling methods are typically required in order not to exceed maximum ambient temperatures.

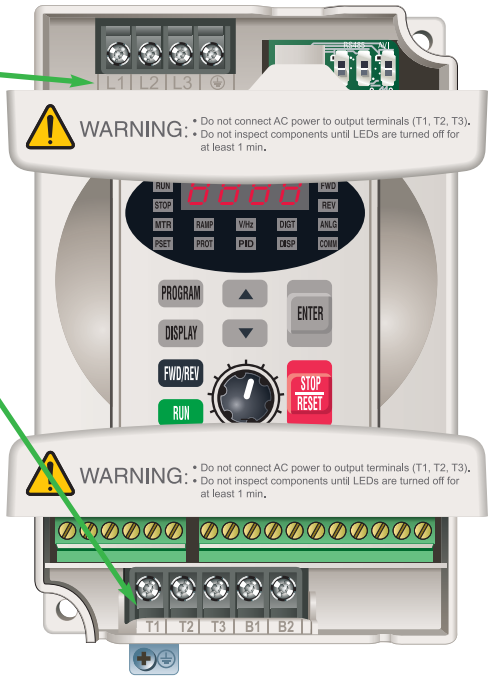


**** For painted sub-panels, scrape the paint from underneath the star washers before tightening them.***

GS2 Specifications — Terminals

Main Circuit Wiring	
Terminal	***Description***
L1, L2, L3	Input power
T1, T2, T3	AC drive output
B1, B2	DB resistor input
⏚	Ground





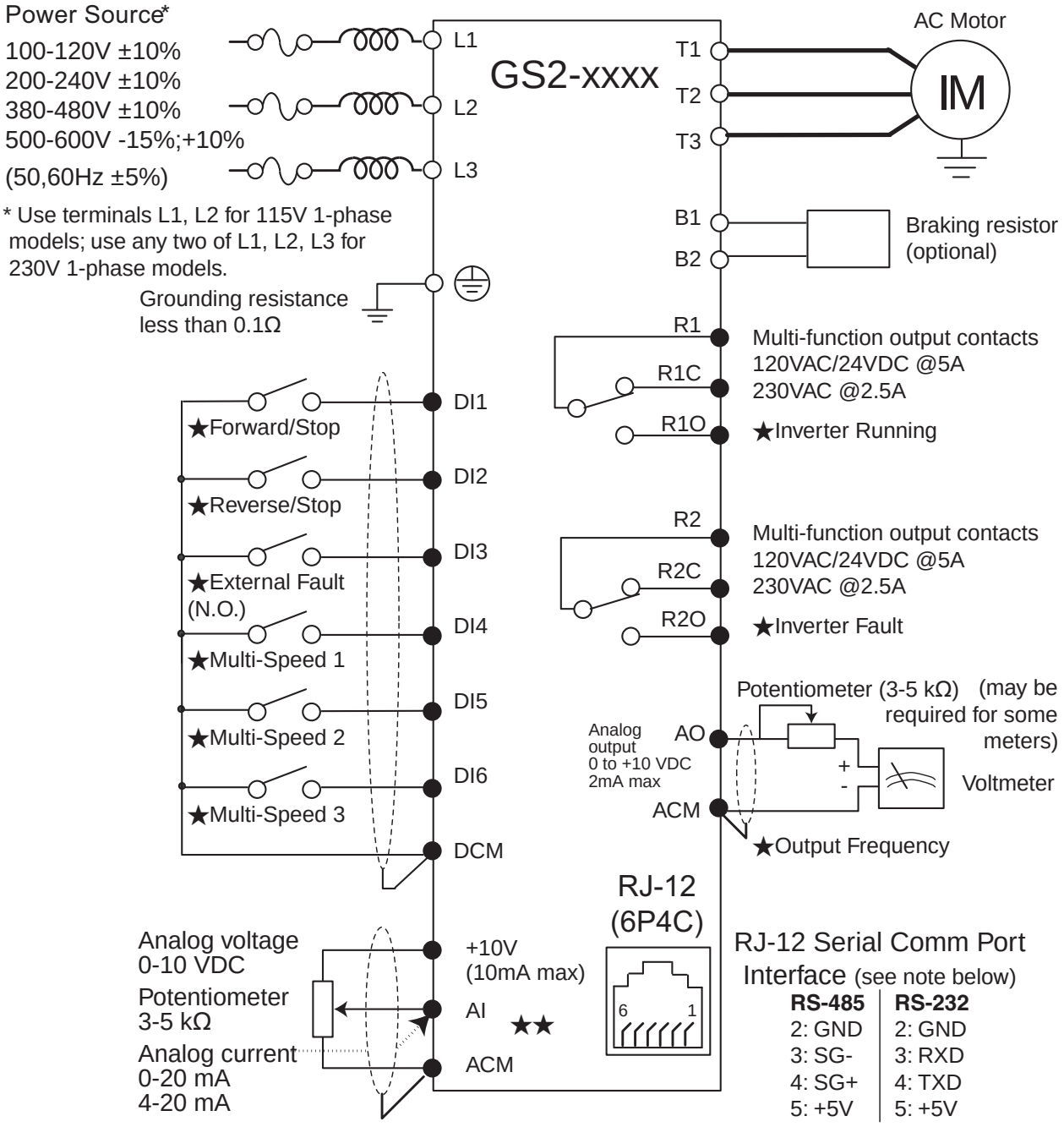
Control Circuit Terminals	
Terminal Symbol	***Description***
R1O	Relay output 1 normally open
R1C	Relay output 1 normally closed
R1	Relay output 1 common
R2O	Relay output 2 normally open
R2C	Relay output 2 normally closed
R2	Relay output 2 common
DI1	Digital input 1
DI2	Digital input 2
DI3	Digital input 3
DI4	Digital input 4
DI5	Digital input 5
DI6	Digital input 6
DCM	Digital common
AI	Analog input
+10V	Internal power supply (DC 10V) @ 10 mA
AO	Analog output
ACM	Analog common

Note: Use twisted-shielded, twisted-pair or shielded-lead wires for the control signal wiring. It is recommended to run all signal wiring in a separate steel conduit. The shield wire should only be connected at the drive. Do not connect shield wire on both ends.

GS2 Specifications — Basic Wiring Diagram

Note: Users MUST connect wiring according to the circuit diagram shown below. (Refer to user manual GS2-M for additional specific wiring information.)

Note: Refer to the following pages for explanations and information regarding line reactors, braking resistors, EMI and RF filters, and fuses: 12–50, 12–56, 12–61, 12–67, 12–68.



★Factory default setting

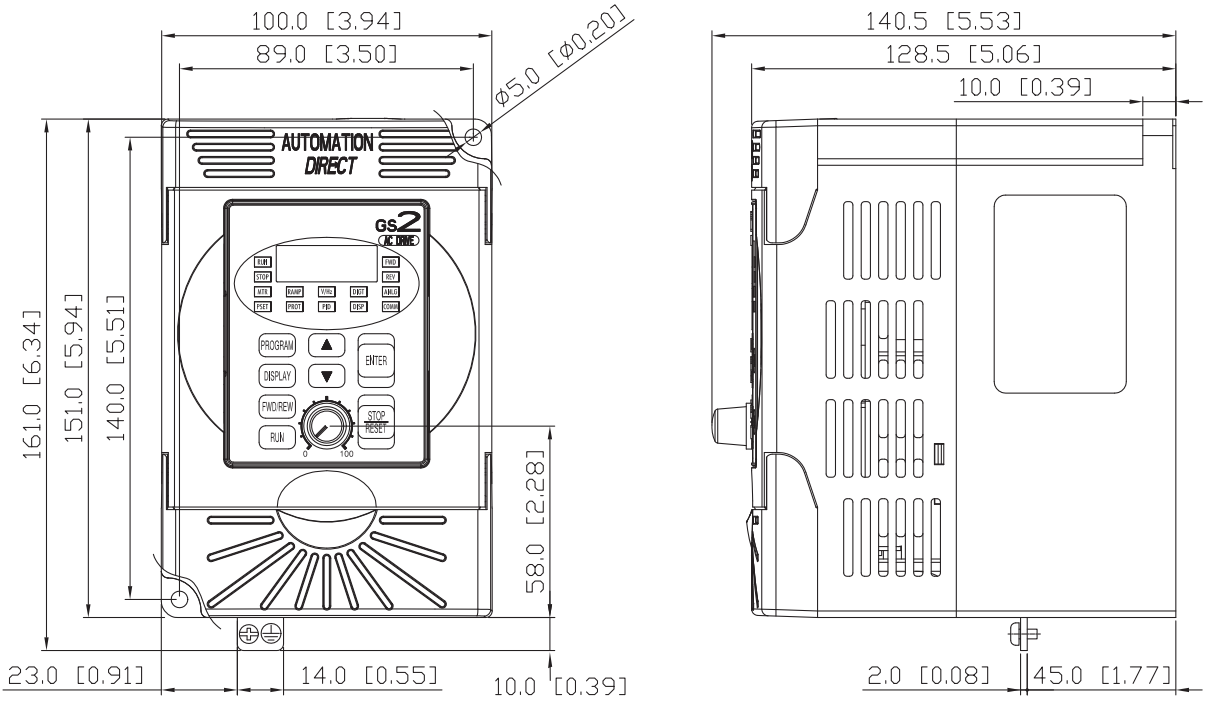
★★Factory default source of frequency command is via the keypad potentiometer

○ Main circuit (power) terminals ● Control circuit terminal ⫩ Shielded leads

WARNING: Do not plug a modem or telephone into the GS2 RJ-12 Serial Comm Port, or permanent damage may result. Terminals 2 and 5 should not be used as a power source for your communication connection.

GS2 Specifications — Dimensions

GS2-10P2, GS2-10P5, GS2-11P0; GS2-20P5, GS2-21P0, GS2-22P0;
GS2-41P0, GS2-42P0, GS2-43P0; GS2-51P0, GS2-52P0, GS2-53P0



GS2-23P0, GS2-25P0, GS2-27P5;
GS2-45P0, GS2-47P5, GS2-4010; GS2-55P0, GS2-57P5, GS2-5010