

Duty Master Custom and Engineered Motors150 -2250 HP TEFC designs for global applications

Reliance world-class motor development continues with the platform of totally enclosed fan-cooled motors. The Global Series incorporates a cast iron frame and end shields to extend Reliance's well known Extra Tough (XT) TEFC offerings. Dimensionally compatible with NEVA and IEC standards, these motors are available to meet IP44, IP54, and IP55.

The Global Series motors utilize advanced design and manufacturing techniques, coupled with superior quality materials to lower noise and significantly improve heat dissipation. This results in more horsepower per frame size than any other similarly configured motor available.

With a focus on continuous improvements in all areas of design, production and service, The Reliance Global Series is manufactured in the first North American motor facility certified to the ISO 9001 quality system. Standard in-process testing exceeds minimum guidelines, and includes three-phase locked rotor tests as well as vibration measurement.

Optional enclosures include TEAO (Totally Enclosed Air Over) and TEAO-BC (blower cooled) designs to meet various application needs.

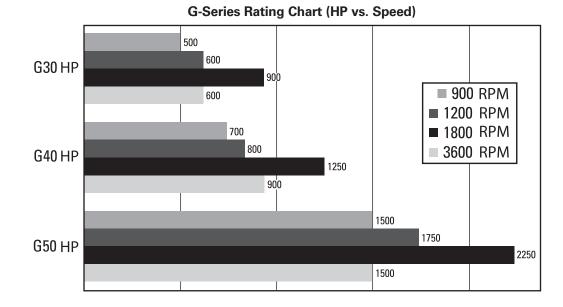
Standard Features Include:

- Cast iron frame and brackets
- Bi-directional rotation
- Stainless steel grounding pads
- Corrosion resistant, metric hardware
- Dowel pin and vertical jackscrew holes

• Field convertible F1, F2, and top mounted terminal boxes

G30, Anti-Friction Bearing Motor

- Shaft capable of 10x rated torque
- Epoxy paint system
- Rigid, low vibration frame
- 100% epoxy resin Class F medium voltage insulation system
- Cast iron bearing inner caps
- 380 to 6600 volt range
- Compliant to applicable sections of IEC 34 and 72-1
- NEMA MG1-20 compliant
- Advanced cooling fan and frame fin design for improved heat dissipation



 Aggregate/Cement
 Food
 Mining
 Forest/Paper
 Petro/Chem
 Unit/Baggage Handling
 HVAC/Industrial Air Handling
 Environmental/Fluid Power
 Automotive
 Metals

RELIANCE

G-30 Platform

Key G30 Platform Benefits:

- Higher horsepower per frame size
- Multiple mounting configurations
- More suitable for variable frequency applications at low speeds
- Lowered Total Cost of Ownership

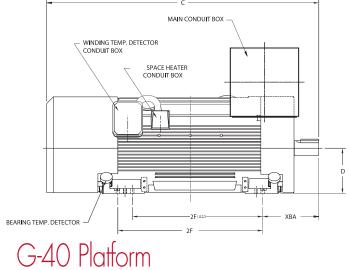
Vibration levels of G30 motors meet or surpass API 541 and IEEE 841 requirements. Premium efficiency (LXE) designs are offered with efficiency ratings significantly higher than those previously available. For instance, 900 HP at 1800 RPM with 96.2% efficiency.

The G30 design is ideal for operation with variable frequency drives. Its excellent heat dissipation capabilities provide for maximum

heat transfer and motor cooling, even at low speeds. This advanced design is superior to those using an internal air circulation system, in which cooling ability is proportional to speed, and reduced at low speeds.

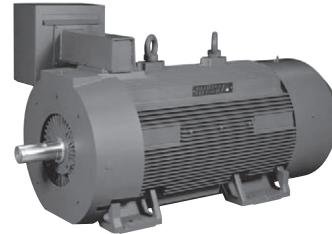
Three NEMA and three IEC frame sizes are available from the G30 platform, featuring dual rear mounting holes to allow drop-in replacement for multiple motor frame sizes.

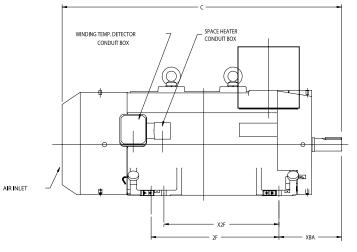
Typical G30 Platform Dimensions



Frame	С	2F	2F(ALT)	D	XBA
G5008	60.14	25	22	12.5	15.5
G5010	67.14	32	28	12.5	15.5
G5012	75.14	40	36	12.5	15.5
G315J (mm)	1566	630	560	315	426
G315G (mm)	1744	800	710	315	426
G315E (mm)	1947	1000	NA	315	426

Refer to 2F(ALT) mounting dimension for guidance in replacing 5007, 5009, 5011, 315J, and 315G frame motors

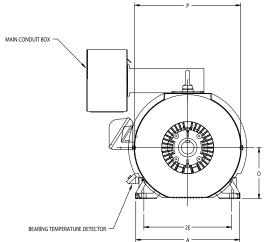




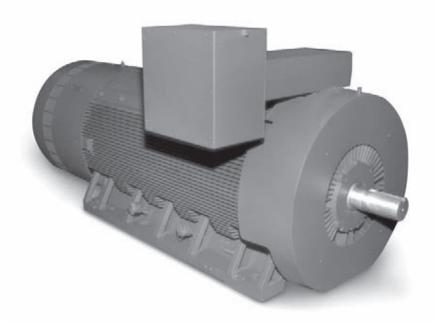
Key G40 Platform Benefits:

The Global series is designed for high efficiency. Premium efficiency (LXE) designs are available with efficiency ratings significantly higher than comparable TEAAC (CACA) enclosure designs with air-to-air heat exchangers. The low profile G series TEFC construction allows for installation in areas too restricted for the taller TEAAC designs.

FRAME	С	2F	X2F	D	XBA
G5810	86.07	36		14.5	18.93
G400	86.07	39.37	35.43	15.75	19.29
G400 (mm)	2404.9	1000	900	400	490



G-50 Platform

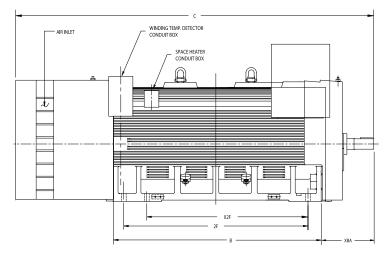


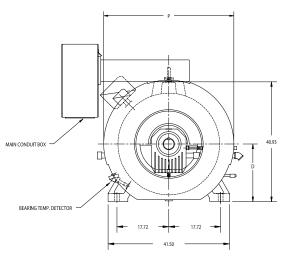
Key G50 Platform Benefits:

- Multiple oversized mounting holes
- Oversized bearings
- One insulated bearing
- Labyrinth bearing seals

FRAME	С	2F	X2F	D	XBA
G500S	106.44	49.21	39.37	19.68	22.25
G500M	120.18	62.99	55.12	19.68	22.25
G500S (mm)	2703.6	1250	1000	499.9	565.15
G500M (mm)	3052.6	1600	1400	499.9	565.15

Typical G50 Platform Dimensions



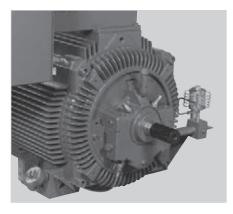


Global Series TEFC Capabilities

(a sample of standard and available construction features)

Frame Family:		G30	G50	
Cast iron finned frame & end brackets:		х	х	х
	Low Voltage (less than 690V)		х	х
Valtere/Exerciserer	Medium Voltage (less than 5000V)		х	х
Voltage/Frequency:	High Voltage (up to 6900V)	х	x x	х
	50 or 60 Hertz	х		х
Winding Insulation:	Low Voltage Standard	х	х	х
	VPI- SolidCure	х	х	х
Class Estandard	2 VPI Sealed - SolidSeal		х	х
(Class F standard for all)	2 VPI Sealed w/water test - Enduraseal Class H		х	х
	Class H	х	x x x x x x x x x x x x x x x x x x x	х
Pooringo	Anti-Friction	х	x x x x	Х
Bearings:	Sleeve	х		Х
	Brass Slinger	х	х	х
Dearing Cooles	A/F bearing Inproseal®	VPI Sealed - SolidSeal x x x VSealed w/water test - Enduraseal Class H x x x Class H x x x Anti-Friction x x x Sleeve x x x Brass Slinger x x x A/F bearing Inproseal® x x x	х	
Bearing Seals:	Sleeve bearing Labyrinth (Taconite)	х	X X	х
	Sleeve bearing Coast-to-Rest	х		х
	Hot rolled AISI 1040	х	x x x x x x x x x x x x x x x x x x x	х
Shaft:	Hot rolled AISI 4140/4150	х	х	х
	Forged	х	x x x x x x x x x x x x x x x x x x x	х

Frame Family:		G30	G40	G50
Rotors:	Cast Aluminum		х	n/a
	Fabricated Copper	х	x x ontact	х
	Horizontal Foot	х	X X X X X X contact factor X X X	х
Mounting:	Vertical P-Base			
	Horiz. Foot C-Face	х	х	n/a
	Horiz. Foot D-Flange	х	х	n/a
Space Heaters:	Strip Style (Coil Head)	х	х	х
	Sheath Style Replaceable	х	х	х
Temperature Detection:	Bearing &/or Winding RTD's	х	х	х
	Bearing &/or Winding Thermocouples	х	х	х
	Winding Thermostats	х	х	х
	Winding Thermistors	х	х	х
	Bearing Dial Thermometer	х	х	х
Inverter Duty:		х	х	х
Industry Specifications:	NEMA	х	х	х
	IEC	х	х	х
	IEEE	х	х	х
	API	х	х	х



(Left) Modified G50 Suitable for Petro-Chemical Applications (Above) G30 Sleeve Bearing with Constant Level Oilers and Bearing RTDs



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