

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer : GOL PUMP TECHNOLOGY, INC.

Product line : W22 - IE3 Premium Efficiency

Frame	: 200L	Locked rotor time	: 18 s (hot) 32 s (cold)
Output	: 45 kW	Temperature rise	: 80 K
Poles	: 2	Duty cycle	: S1
Frequency	: 60 Hz	Ambient temperature	: -20 °C to +40 °C
Rated voltage	: 230/460 V	Altitude	: 3280 ft
Rated current	: 138/69.1 A	Protection degree	: IP55
L. R. Amperes	: 967/483 A	Cooling method	: IC411 - TEFC
LRC	: 7.0	Mounting	: B35T
No load current	: 43.0/21.5 A	Rotation ¹	: Both
Rated speed	: 3560 rpm	Noise level ²	: 76.0 dB(A)
Slip	: 1.11 %	Vibration class	: A
Rated torque	: 121 Nm	Starting method	: Direct On Line
Locked rotor torque	: 280 %	Coupling	: Direct
Pull up torque	: 185 %	Approx. weight ³	: 584 lb
Breakdown torque	: 290 %	Painting plan	: 203A
Insulation class	: F	Color	: RAL 5009
Service factor	: 1.25	Design	: N
Moment of inertia (J)	: 5.02 sq.ft.lb		
Output	50% 75% 100%	Load type	: -
Efficiency (%)	93.5 94.0 94.0	Load torque	: -
Power Factor	0.77 0.84 0.87	Load inertia (J=GD ² /4)	: -
Bearing type	Drive end Non drive end 6312-ZZ-C3 6212-ZZ-C3	Foundation loads	
Lubrication interval	- -	Max. traction	: 3106.0 N
Lubricant amount	- -	Max. compression	: 5705.6 N
Lubricant type	MOBIL POLYREX EM		

Notes
See notes on page 2.

This revision replaces and cancel the previous one, which must be eliminated.
(1) Looking the motor from the shaft end.
(2) Measured at 1m and with tolerance of +3dB(A).
(3) Approximate weight, subject to be changed after manufacturing process.
(4) At 100% of full load.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in IEC 60034-1.

Rev.	Changes Summary	Rev.	Checked	Date
Performed by	johnson	1228355523 Page Rev. 1 / 5 1		
Checked by	AUTOMATICO			
Date	02/11/2021			

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer : GOL PUMP TECHNOLOGY, INC.

Product line : W22 - IE3 Premium Efficiency

Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermistor - 2 wires	1 x Phase	155°C

Notes

Standards	Specification	: IEC 60034-1	Vibration	: IEC 60034-14
	Test	: IEC 60034-2	Tolerance	: IEC 60034-1
	Noise	: IEC 60034-9		

<p>This revision replaces and cancel the previous one, which must be eliminated. (1) Looking the motor from the shaft end. (2) Measured at 1m and with tolerance of +3dB(A). (3) Approximate weight, subject to be changed after manufacturing process. (4) At 100% of full load.</p>	<p>These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in IEC 60034-1.</p>
---	---

Rev.	Changes Summary	Rev.	Checked	Date	
Performed by	johnson	122835523			
Checked by	AUTOMATICO			Page	Rev.
Date	02/11/2021			2 / 5	1

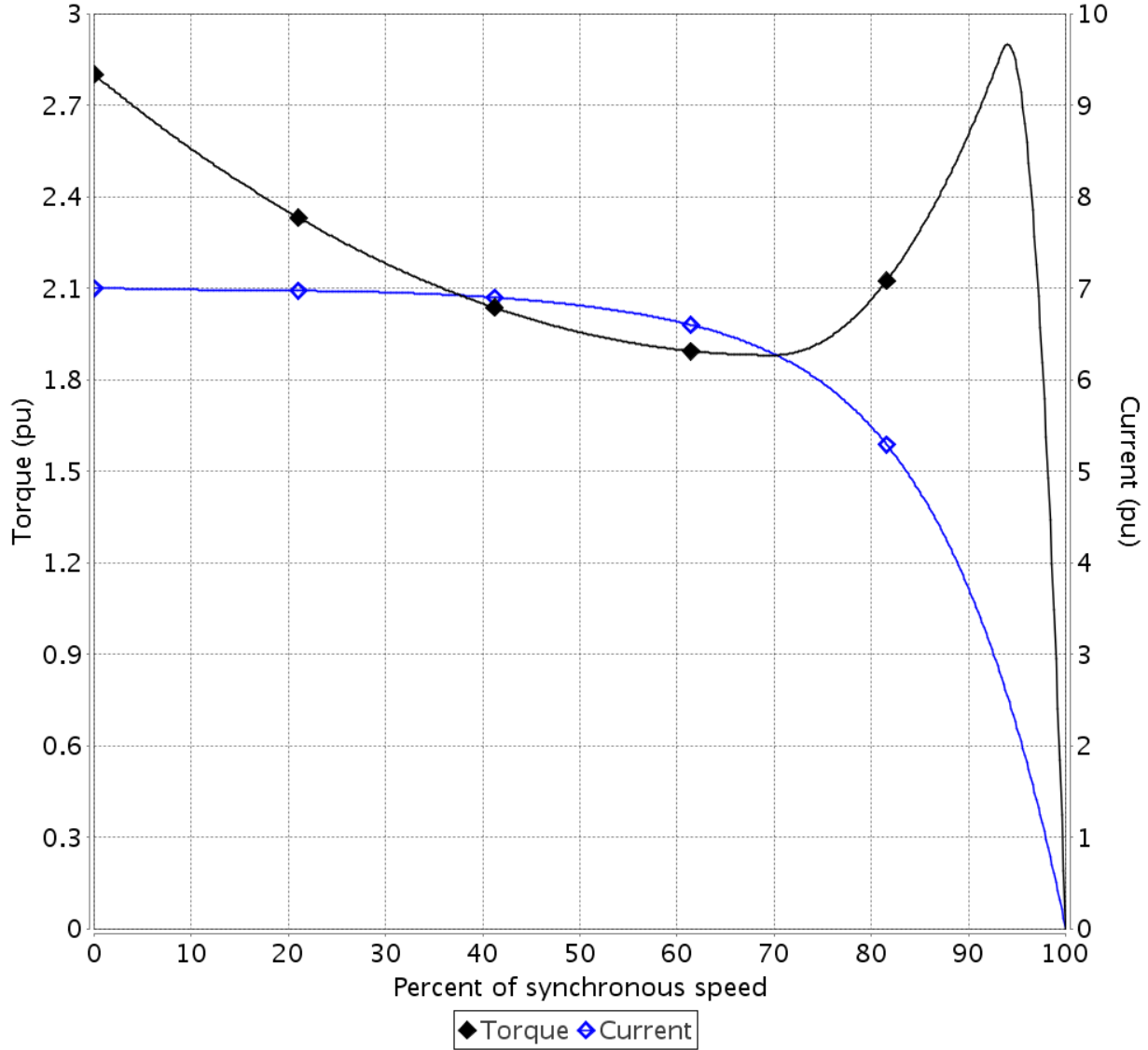
TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : GOL PUMP TECHNOLOGY, INC.

Product line : W22 - IE3 Premium Efficiency



Performance : 45 kW 230/460 V 60 Hz 2P 200L

Rated current	: 138/69.1 A	Moment of inertia (J)	: 5.02 sq.ft.lb
LRC	: 7.0	Duty cycle	: S1
Rated torque	: 121 Nm	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.25
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 3560 rpm	Design	: N

Locked rotor time 100% : 18 s (hot) 32 s (cold)

Load inertia (J=GD²/4) : 5.02 sq.ft.lb

Rev.	Changes Summary	Rev.	Checked	Date
Performed by	johnson	122835523		
Checked by	AUTOMATICO			
Date	02/11/2021			
		Page	Rev.	
		3 / 5	1	

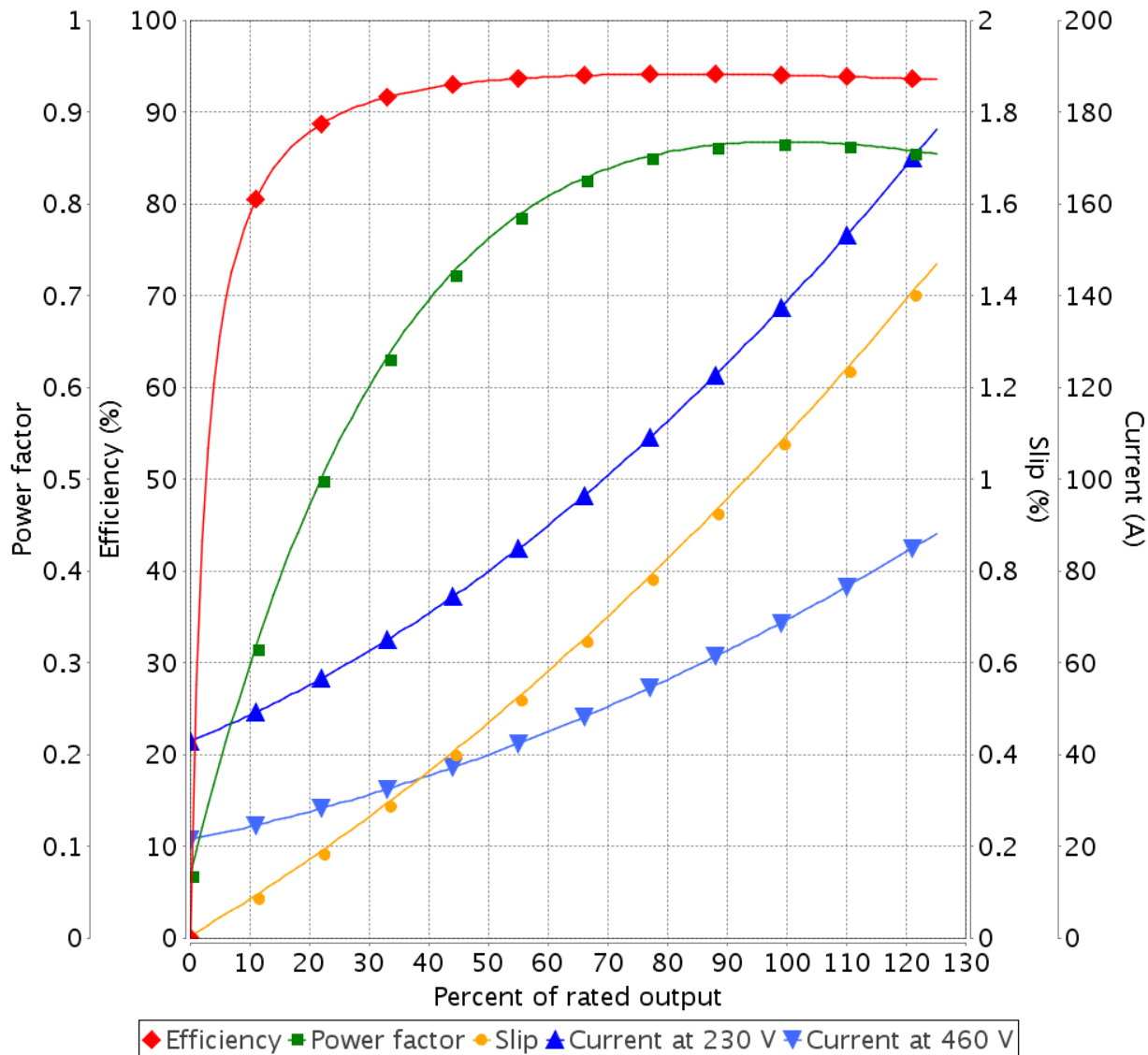
LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : GOL PUMP TECHNOLOGY, INC.

Product line : W22 - IE3 Premium Efficiency



Performance : 45 kW 230/460 V 60 Hz 2P 200L

Rated current	: 138/69.1 A	Moment of inertia (J)	: 5.02 sq.ft.lb
LRC	: 7.0	Duty cycle	: S1
Rated torque	: 121 Nm	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.25
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 3560 rpm	Design	: N

Rev.	Changes Summary	Rev.	Checked	Date
Performed by	johnson	122835523		
Checked by		Page	Rev.	
Date	02/11/2021	4 / 5	1	

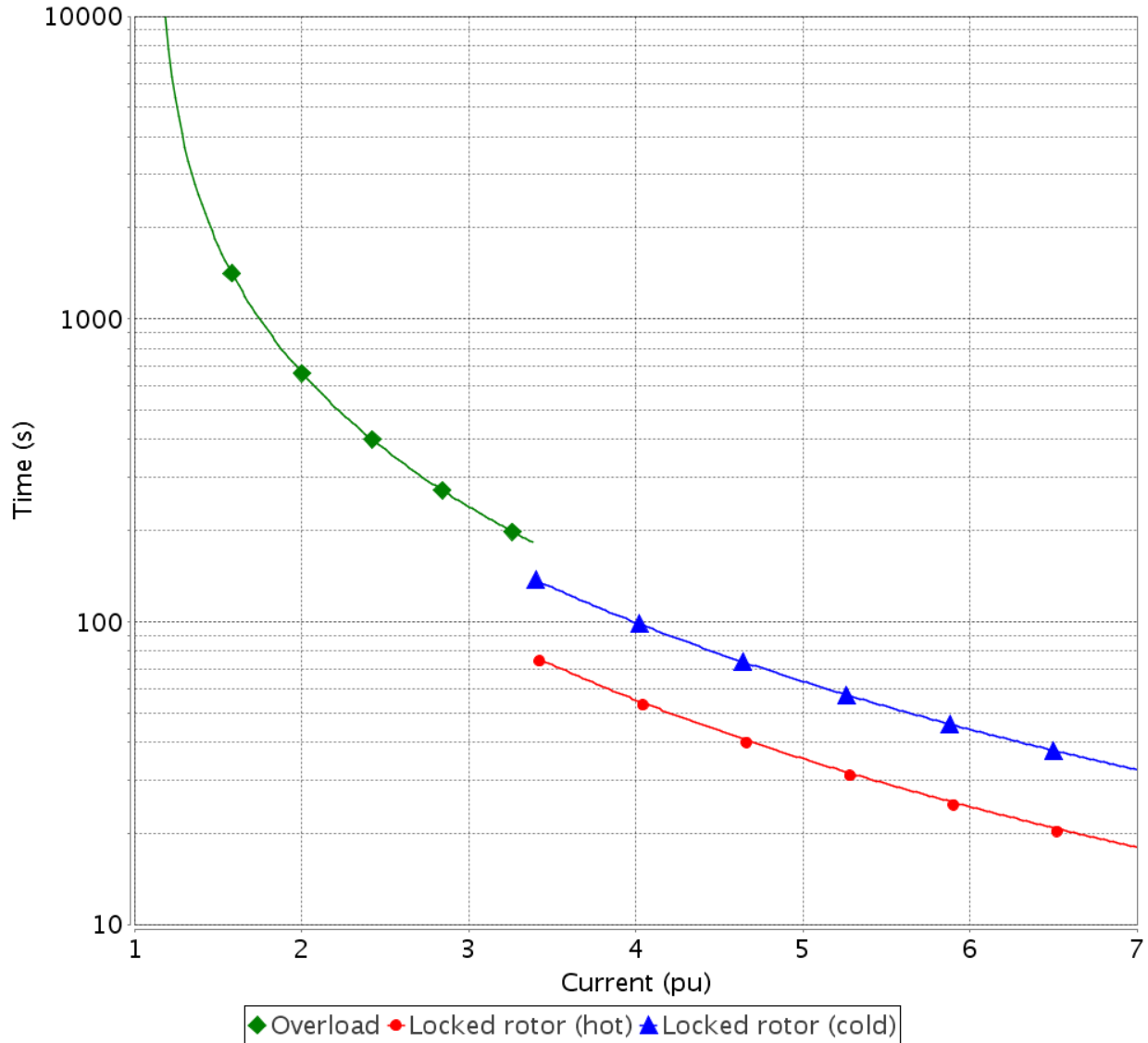
THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : GOL PUMP TECHNOLOGY, INC.

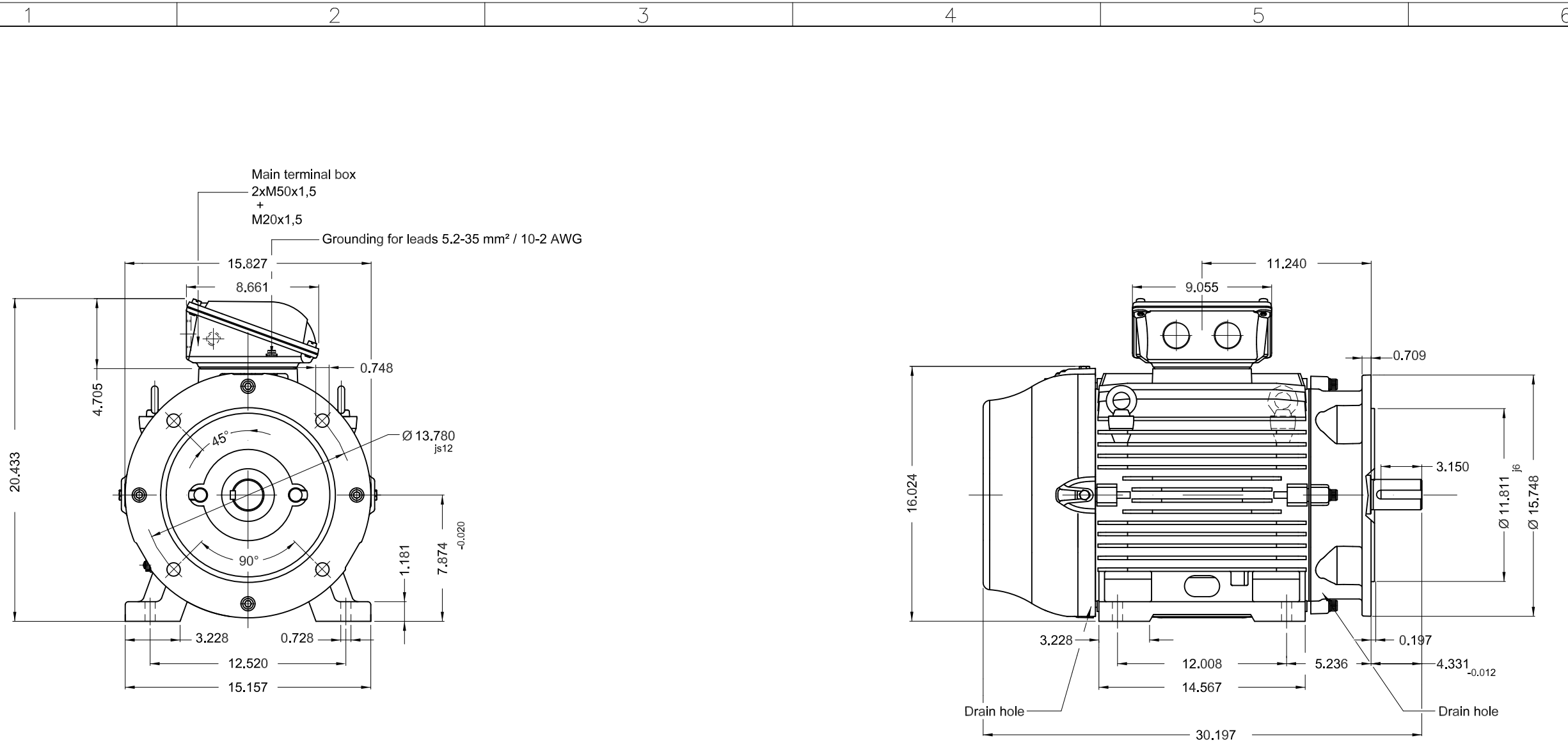
Product line : W22 - IE3 Premium Efficiency



Performance : 45 kW 230/460 V 60 Hz 2P 200L

Rated current	: 138/69.1 A	Moment of inertia (J)	: 5.02 sq.ft.lb
LRC	: 7.0	Duty cycle	: S1
Rated torque	: 121 Nm	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.25
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 3560 rpm	Design	: N
Heating constant	: 32.1 min		
Cooling constant	: 96.3 min		

Rev.	Changes Summary		Rev.	Checked	Date
Performed by	johnson		122835523 Page 5 / 5 Rev. 1		
Checked by					
Date	02/11/2021				



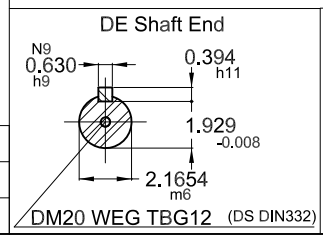
A
B
C
D
E

Main terminal box
2xM50x1,5
+
M20x1,5
Grounding for leads 5.2-35 mm² / 10-2 AWG

45 kW 02 Poles 60 Hz A

GOL PUMP TECHNOLOGY, INC.

Color RAL 5009
Painting plan 203A
Mounting B35T



ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PHASE W22 MOTOR - PREMIUM EFF					
CHECKED		FRAME 200L IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering				

PREVIEW
WDD

SHEET 1 / 1