

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer : GOL PUMP TECHNOLOGY, INC.

Product line : W22 - IE3 Premium Efficiency

Frame	: 200M	Locked rotor time	: 12 s (hot) 22 s (cold)
Output	: 30 kW	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: S1
Frequency	: 60 Hz	Ambient temperature	: -20 °C to +40 °C
Rated voltage	: 230/460 V	Altitude	: 3280 ft
Rated current	: 95.3/47.6 A	Protection degree	: IP55
L. R. Amperes	: 695/348 A	Cooling method	: IC411 - TEFC
LRC	: 7.3	Mounting	: B35T
No load current	: 42.1/21.0 A	Rotation <sup>1</sup>	: Both
Rated speed	: 1782 rpm	Noise level <sup>2</sup>	: 66.0 dB(A)
Slip	: 1.00 %	Vibration class	: A
Rated torque	: 161 Nm	Starting method	: Direct On Line
Locked rotor torque	: 280 %	Coupling	: Direct
Pull up torque	: 195 %	Approx. weight <sup>3</sup>	: 474 lb
Breakdown torque	: 280 %	Painting plan	: 203A
Insulation class	: F	Color	: RAL 5009
Service factor	: 1.25	Design	: N
Moment of inertia (J)	: 7.60 sq.ft.lb		

Output	50%	75%	100%
Efficiency (%)	93.5	94.0	94.1
Power Factor	0.68	0.78	0.84

Load type	: -
Load torque	: -
Load inertia (J=GD <sup>2</sup> /4)	: -

	Drive end	Non drive end
Bearing type	6312-ZZ-C3	6212-ZZ-C3
Lubrication interval	-	-
Lubricant amount	-	-
Lubricant type	MOBIL POLYREX EM	

Foundation loads	
Max. traction	: 4610.9 N
Max. compression	: 6720.0 N

### 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		1228358956		
Checked by	AUTOMATICO		Page	Rev.	
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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		

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- (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.

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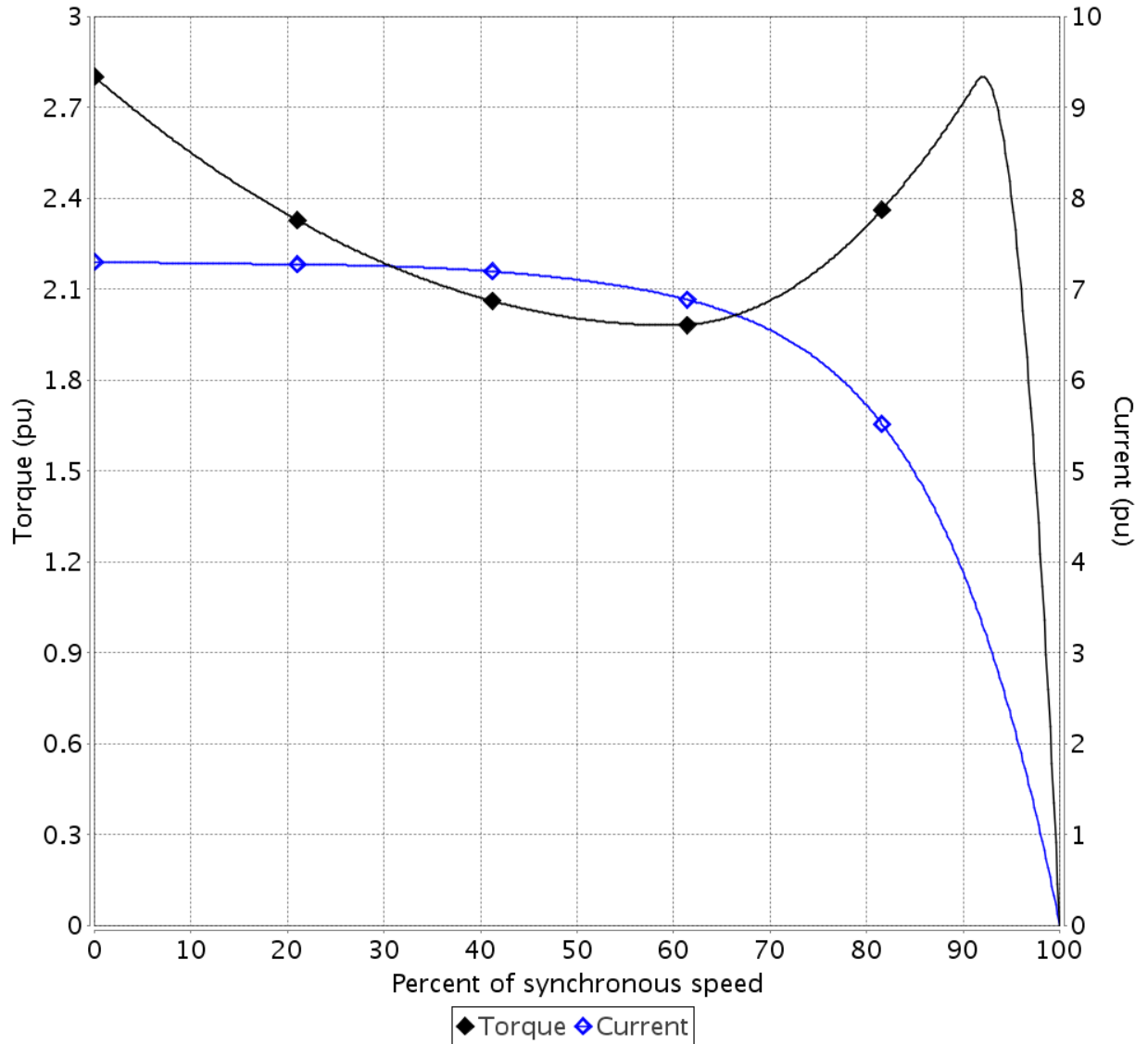
# TORQUE AND CURRENT VS SPEED CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer : GOL PUMP TECHNOLOGY, INC.

Product line : W22 - IE3 Premium Efficiency



Performance : 30 kW 230/460 V 60 Hz 4P 200M

Rated current	: 95.3/47.6 A	Moment of inertia (J)	: 7.60 sq.ft.lb
LRC	: 7.3	Duty cycle	: S1
Rated torque	: 161 Nm	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.25
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 1782 rpm	Design	: N

Locked rotor time 100% : 12 s (hot) 22 s (cold)  
Load inertia (J=GD<sup>2</sup>/4) : 7.60 sq.ft.lb

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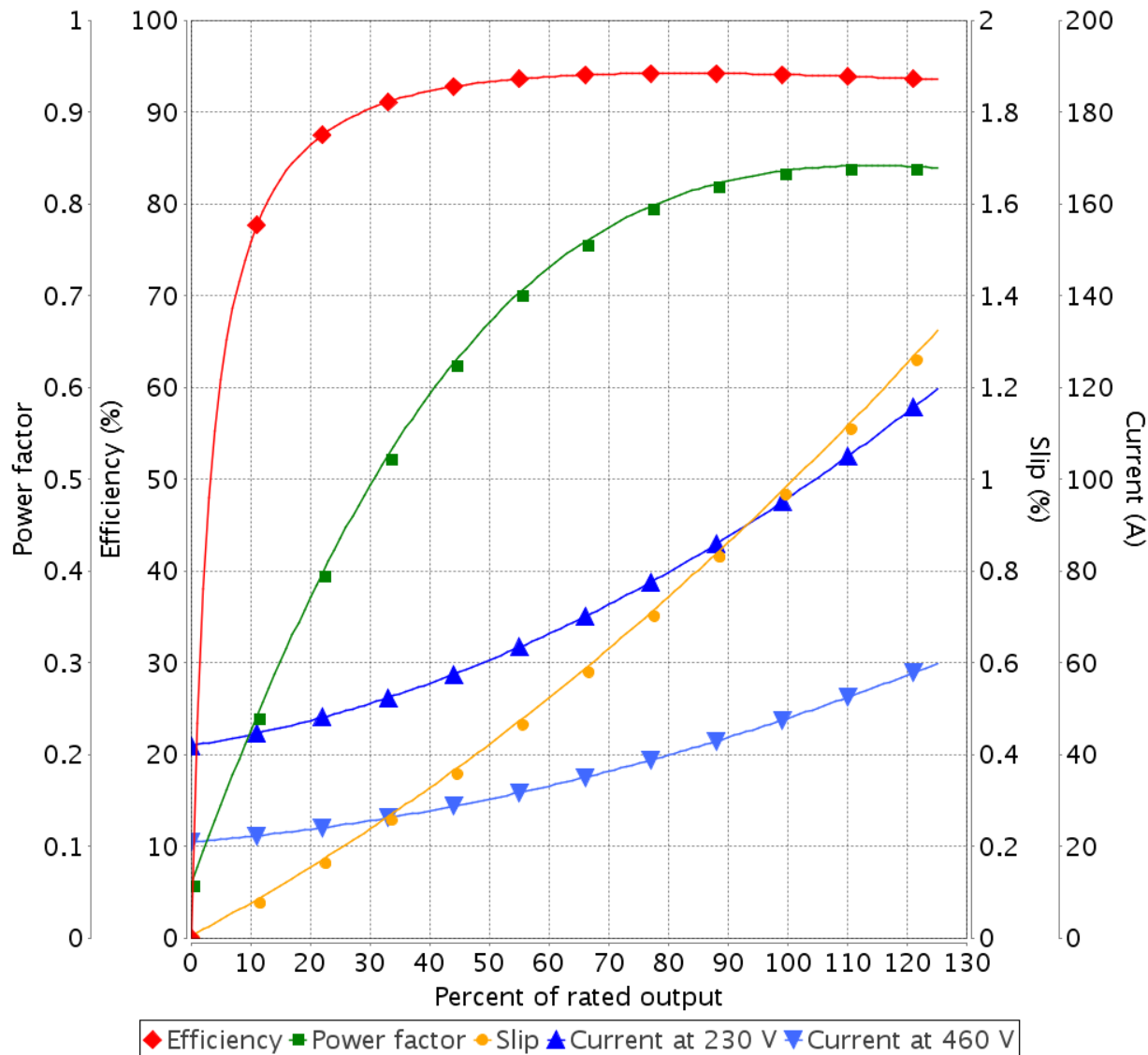
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



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Product line : W22 - IE3 Premium Efficiency



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Rated current : 95.3/47.6 A  
 LRC : 7.3  
 Rated torque : 161 Nm  
 Locked rotor torque : 280 %  
 Breakdown torque : 280 %  
 Rated speed : 1782 rpm

Moment of inertia (J) : 7.60 sq.ft.lb  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : N

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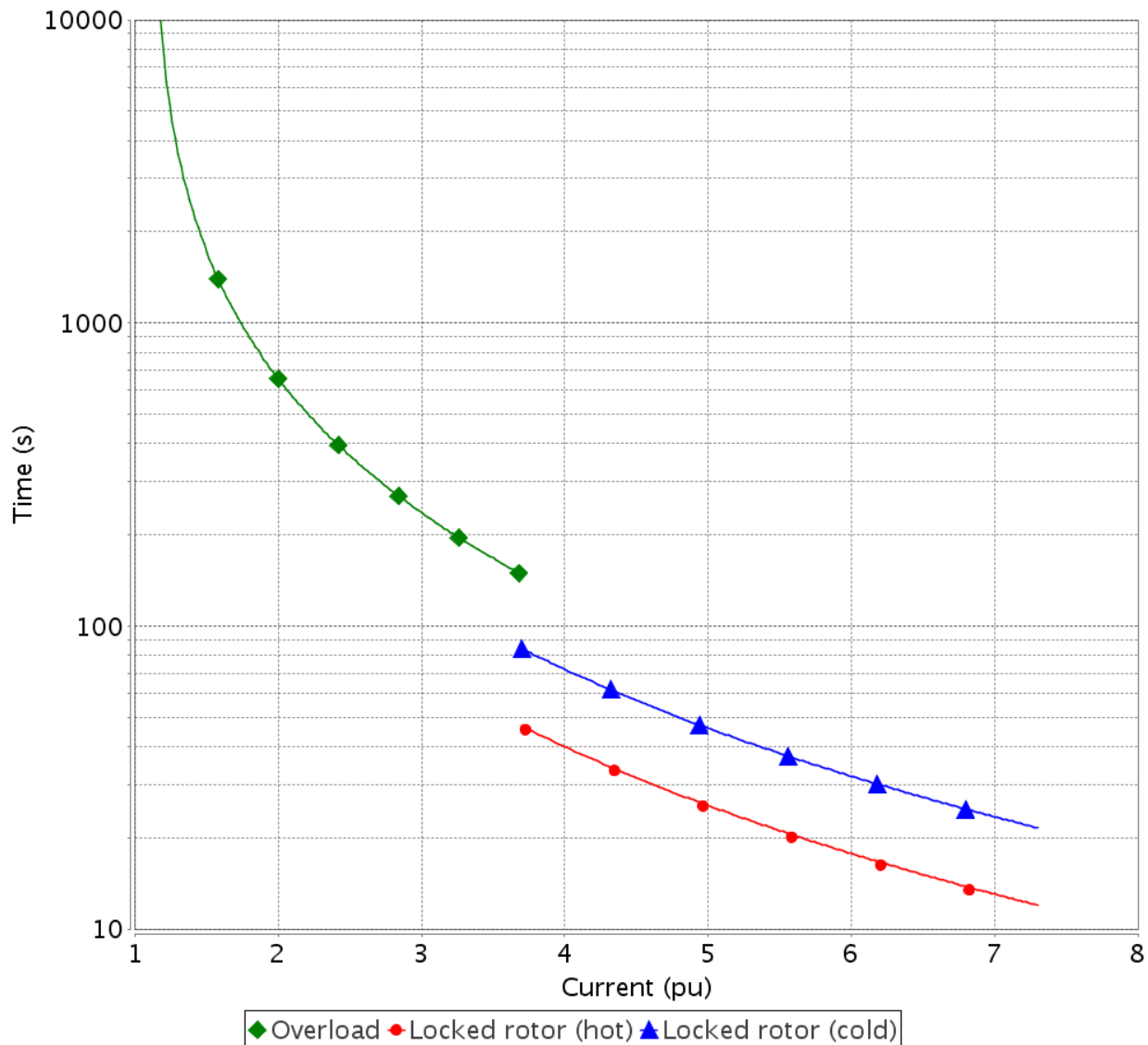
# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



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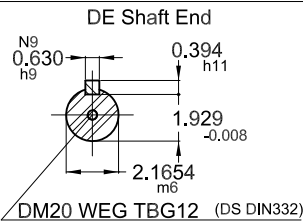
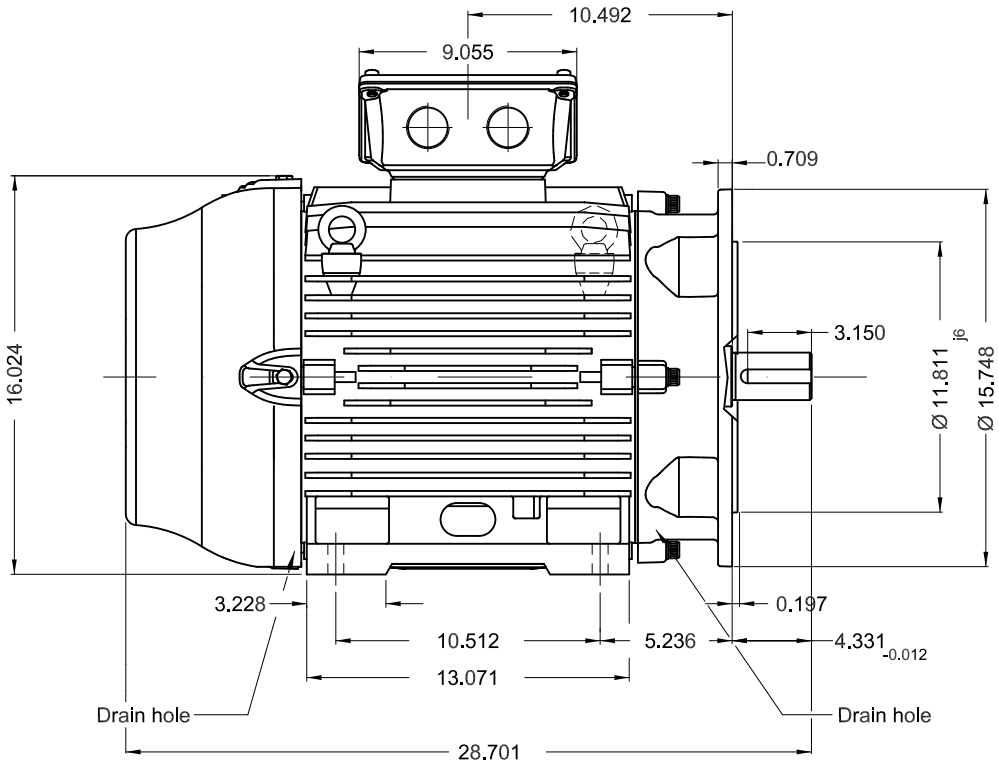
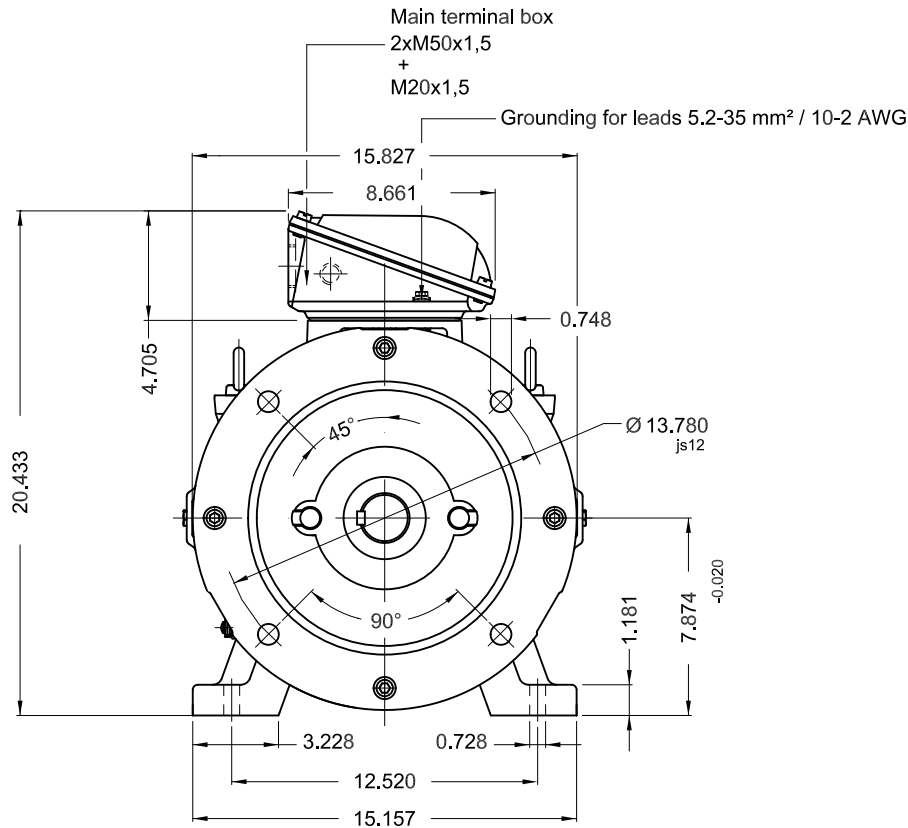
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Performance : 30 kW 230/460 V 60 Hz 4P 200M

Rated current	: 95.3/47.6 A	Moment of inertia (J)	: 7.60 sq.ft.lb
LRC	: 7.3	Duty cycle	: S1
Rated torque	: 161 Nm	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.25
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 1782 rpm	Design	: N
Heating constant	: 31.7 min		
Cooling constant	: 95.1 min		

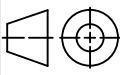

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Color RAL 5009  
Painting plan 203A  
Mounting B35T

30 kW 04 Poles 60 Hz A

GOL PUMP TECHNOLOGY, INC.

ECM	LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	 THREE PHASE W22 MOTOR - PREMIUM EFF FRAME 200M IP55 TEFC				PREVIEW WDD				
CHECKED										
RELEASED										
REL DT.		WMO	Jaragua do Sul	Product Engineering	SHEET	1 / 1				