

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP High Efficiency Three-Phase Product code : 13043433

Frame	: 213/5T	Locked rotor time	: 43s (cold) 24s (hot)
Output	: 5 HP (3.7 kW)	Temperature rise	: 80 K
Poles	: 6	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 208-230/460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 16.1-14.5/7.27 A	Protection degree	: IP21
L. R. Amperes	: 96.5-87.2/43.6 A	Cooling method	: IC01 - ODP
LRC	: 6.0x(Code H)	Mounting	: F-1
No load current	: 6.90-8.00/4.00 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1160 rpm	Noise level <sup>2</sup>	: 59.0 dB(A)
Slip	: 3.33 %	Starting method	: Direct On Line
Rated torque	: 30.3 Nm	Approx. weight <sup>3</sup>	: 48.0 kg
Locked rotor torque	: 160 %		
Breakdown torque	: 220 %		
Insulation class	: F		
Service factor	: 1.15		
Moment of inertia (J)	: 0.0426 kgm <sup>2</sup>		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	86.5	87.5	87.5	Max. traction	: 1275 N
Power Factor	0.54	0.67	0.73	Max. compression	: 1746 N

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6208 ZZ	6206 ZZ
Sealing	:	Without Bearing Seal	Without Bearing Seal
Lubrication interval	:	-	-
Lubricant amount	:	-	-
Lubricant type	:	Mobil Polyrex EM	

### Notes

This revision replaces and cancel the previous one, which must be eliminated.

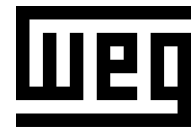
- (1) Looking the motor from the shaft end.
- (2) Measured at 1m and with tolerance of +3dB(A).
- (3) Approximate weight subject to changes after manufacturing process.
- (4) At 100% of full load.

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

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Date	04/02/2020			

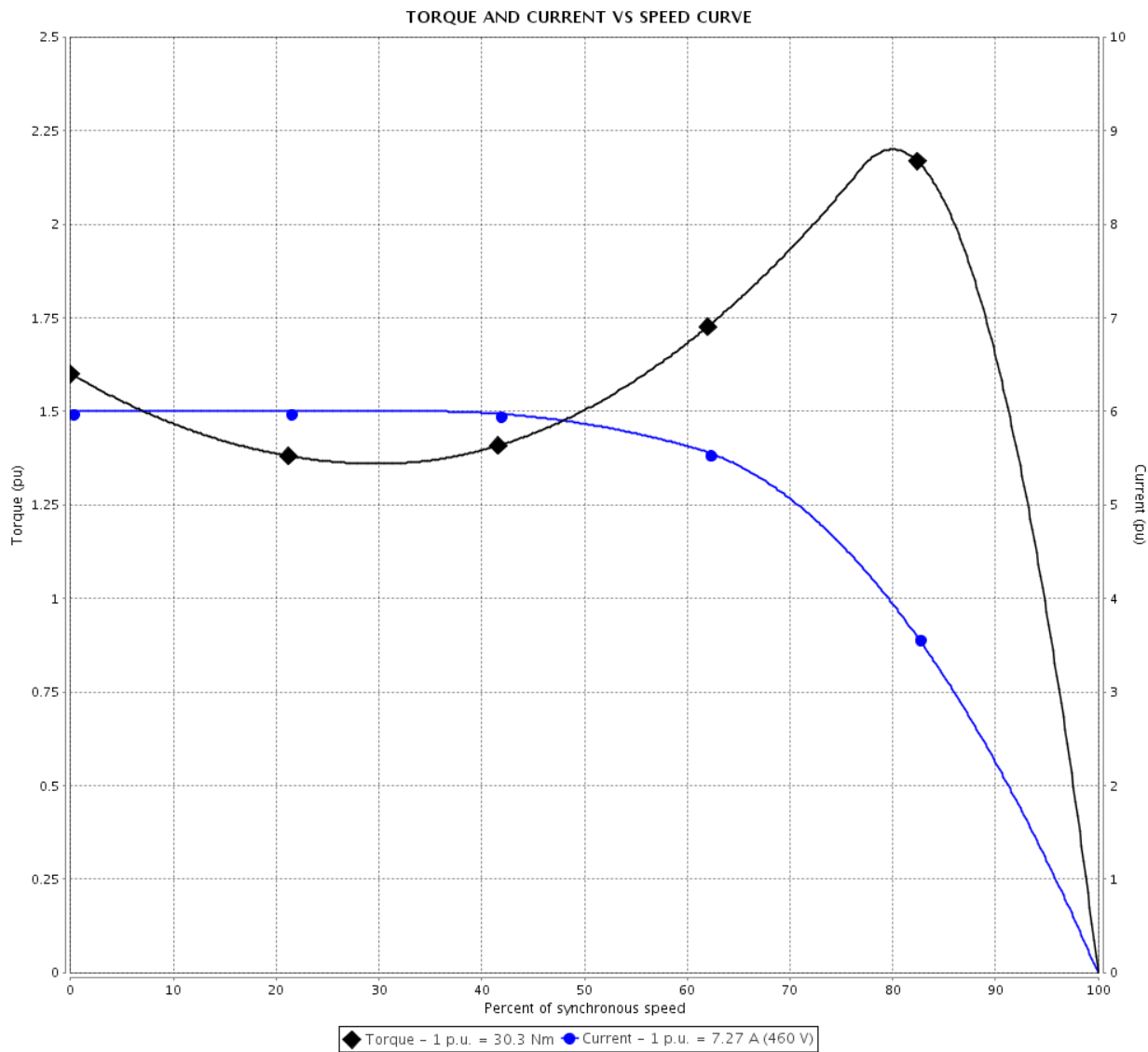
# TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP High Efficiency Three-Phase Product code : 13043433



Performance : 208-230/460 V 60 Hz 6P

Rated current	: 16.1-14.5/7.27 A	Moment of inertia (J)	: 0.0426 kgm <sup>2</sup>
LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 30.3 Nm	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.15
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 1160 rpm	Design	: B

Locked rotor time : 43s (cold) 24s (hot)

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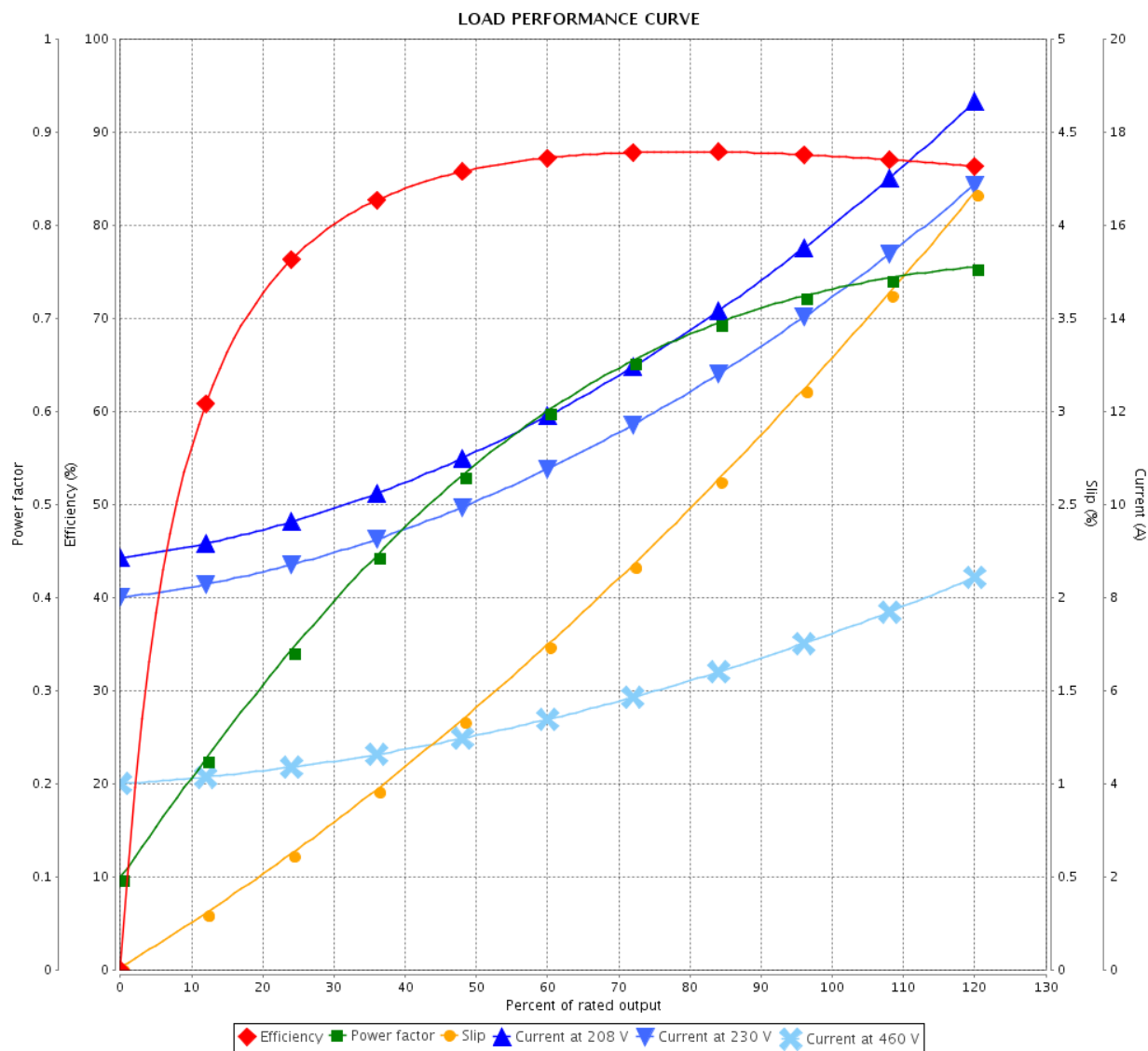
# LOAD PERFORMANCE CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP High Efficiency Three-Phase Product code : 13043433



Performance : 208-230/460 V 60 Hz 6P

Rated current : 16.1-14.5/7.27 A  
 LRC : 6.0  
 Rated torque : 30.3 Nm  
 Locked rotor torque : 160 %  
 Breakdown torque : 220 %  
 Rated speed : 1160 rpm

Moment of inertia (J) : 0.0426 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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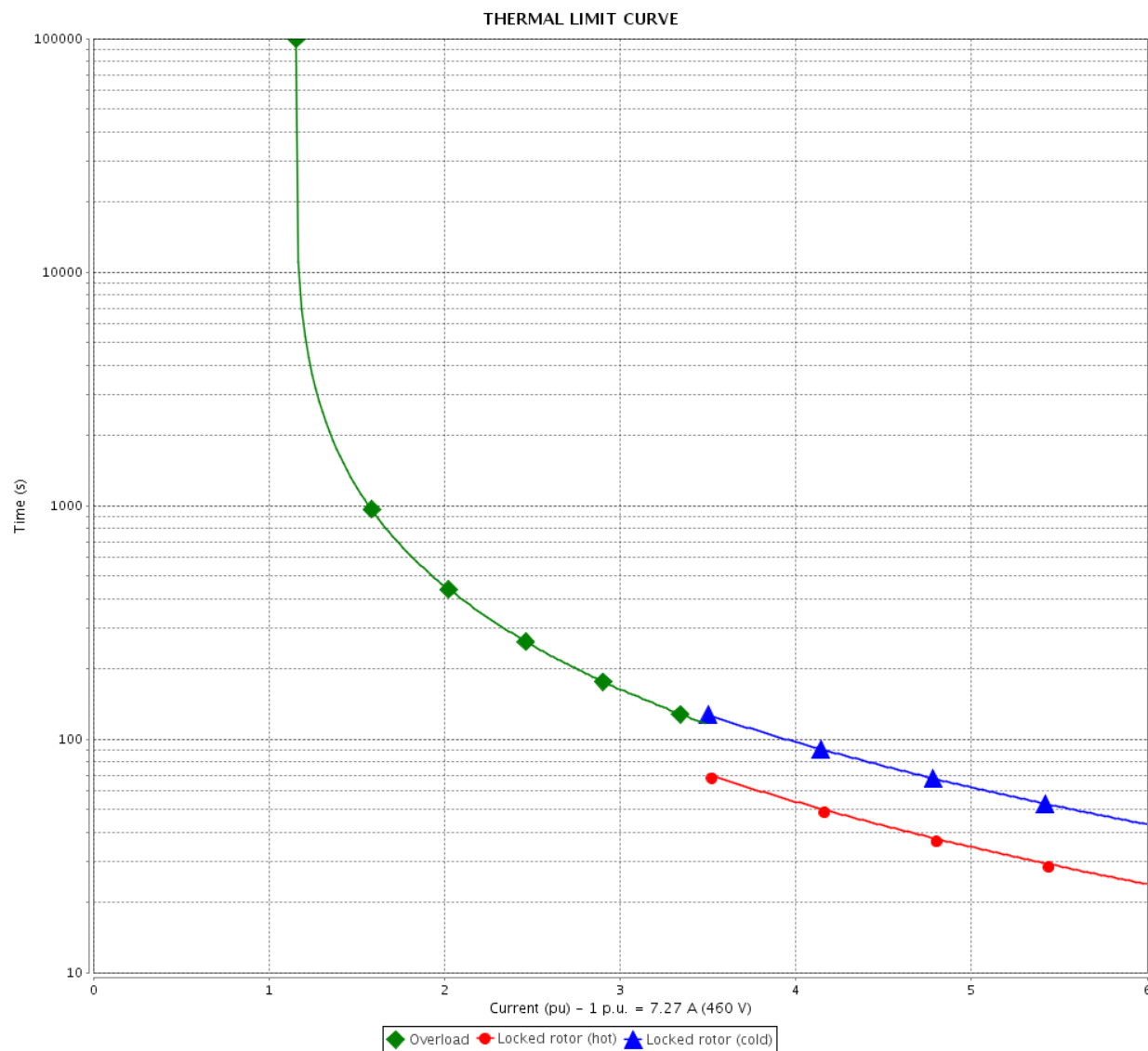
# THERMAL LIMIT CURVE

## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP High Efficiency Three-Phase Product code : 13043433



Performance : 208-230/460 V 60 Hz 6P

Rated current	: 16.1-14.5/7.27 A	Moment of inertia (J)	: 0.0426 kgm <sup>2</sup>
LRC	: 6.0	Duty cycle	: Cont.(S1)
Rated torque	: 30.3 Nm	Insulation class	: F
Locked rotor torque	: 160 %	Service factor	: 1.15
Breakdown torque	: 220 %	Temperature rise	: 80 K
Rated speed	: 1160 rpm	Design	: B

Heating constant

Cooling constant

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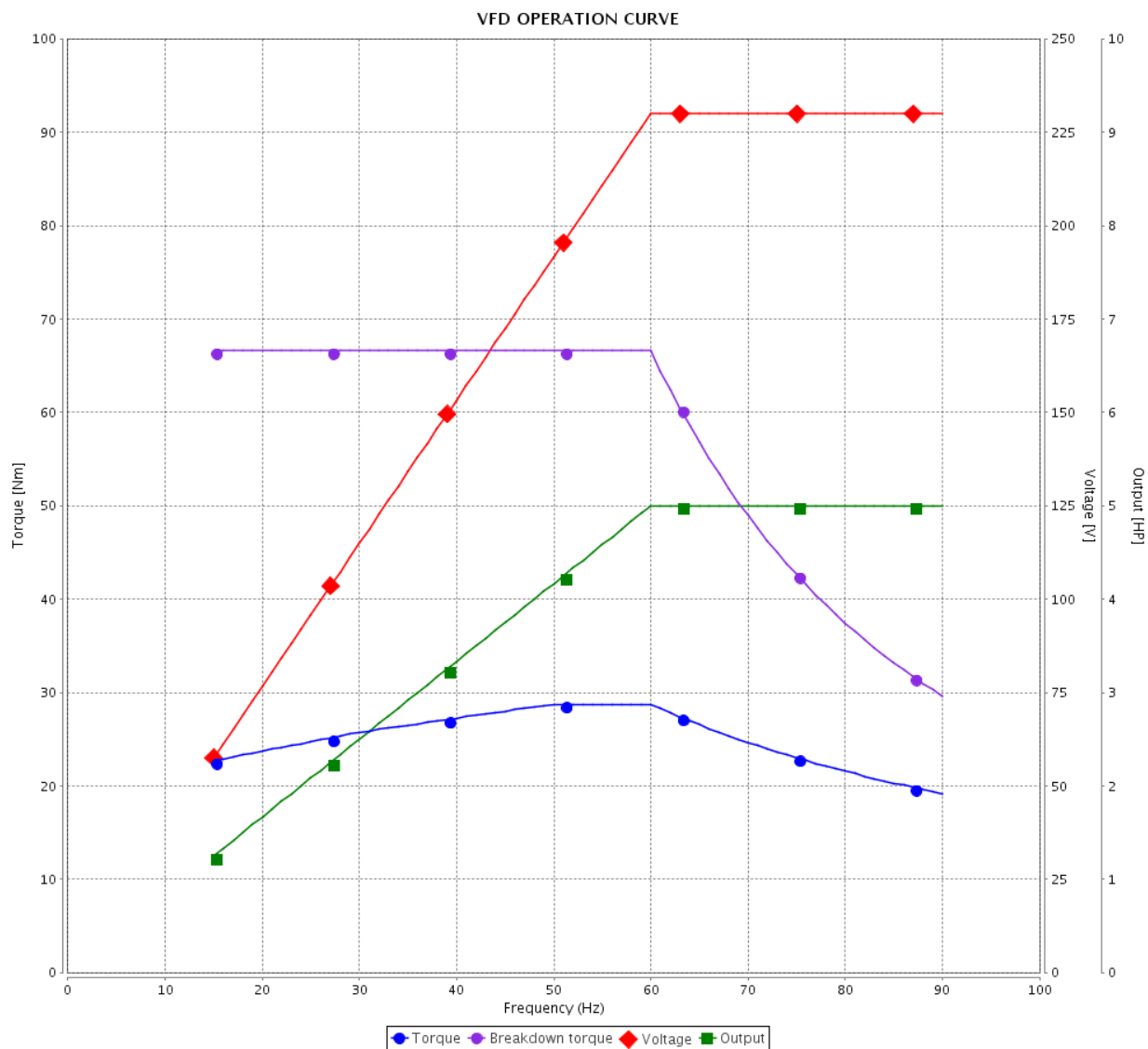
# VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP High Efficiency Three-Phase Product code : 13043433



Performance : 208-230/460 V 60 Hz 6P

Rated current : 16.1-14.5/7.27 A  
 LRC : 6.0  
 Rated torque : 30.3 Nm  
 Locked rotor torque : 160 %  
 Breakdown torque : 220 %  
 Rated speed : 1160 rpm

Moment of inertia (J) : 0.0426 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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