

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer	: Dealers Industrial Equipment			
Product line	: W21 Explosion-proof Motor NEMA Premium Efficiency Three-Phase		Product code :	14284619
			Catalog # :	01018XT3E215TC
Frame	: L215TC		Locked rotor time	: 27s (cold) 15s (hot)
Output	: 10 HP (7.5 kW)		Temperature rise	: 80 K
Poles	: 4		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	: 28.1-25.4/12.7 A		Protection degree	: IP55
L. R. Amperes	: 183-165/82.5 A		Cooling method	: IC411 - TEFC
LRC	: 6.5x(Code H)		Mounting	: F-1
No load current	: 9.48-11.0/5.50 A		Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 1765 rpm		Noise level <sup>2</sup>	: 58.0 dB(A)
Slip	: 1.94 %		Starting method	: Direct On Line
Rated torque	: 29.4 ft.lb		Approx. weight <sup>3</sup>	: 236 lb
Locked rotor torque	: 210 %			
Breakdown torque	: 300 %			
Insulation class	: F			
Service factor	: 1.15			
Design	: B			
Output	25%	50%	75%	100%
Efficiency (%)	89.4	90.2	91.0	91.7
Power Factor	0.42	0.62	0.75	0.81
	Foundation loads			
			Max. traction	: 379 lb
			Max. compression	: 615 lb
		<u>Drive end</u>		<u>Non drive end</u>
Bearing type	:	6308 2RS		6207 2RS
Sealing	:	Oil Seal		Lip 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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### Thermal protection

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

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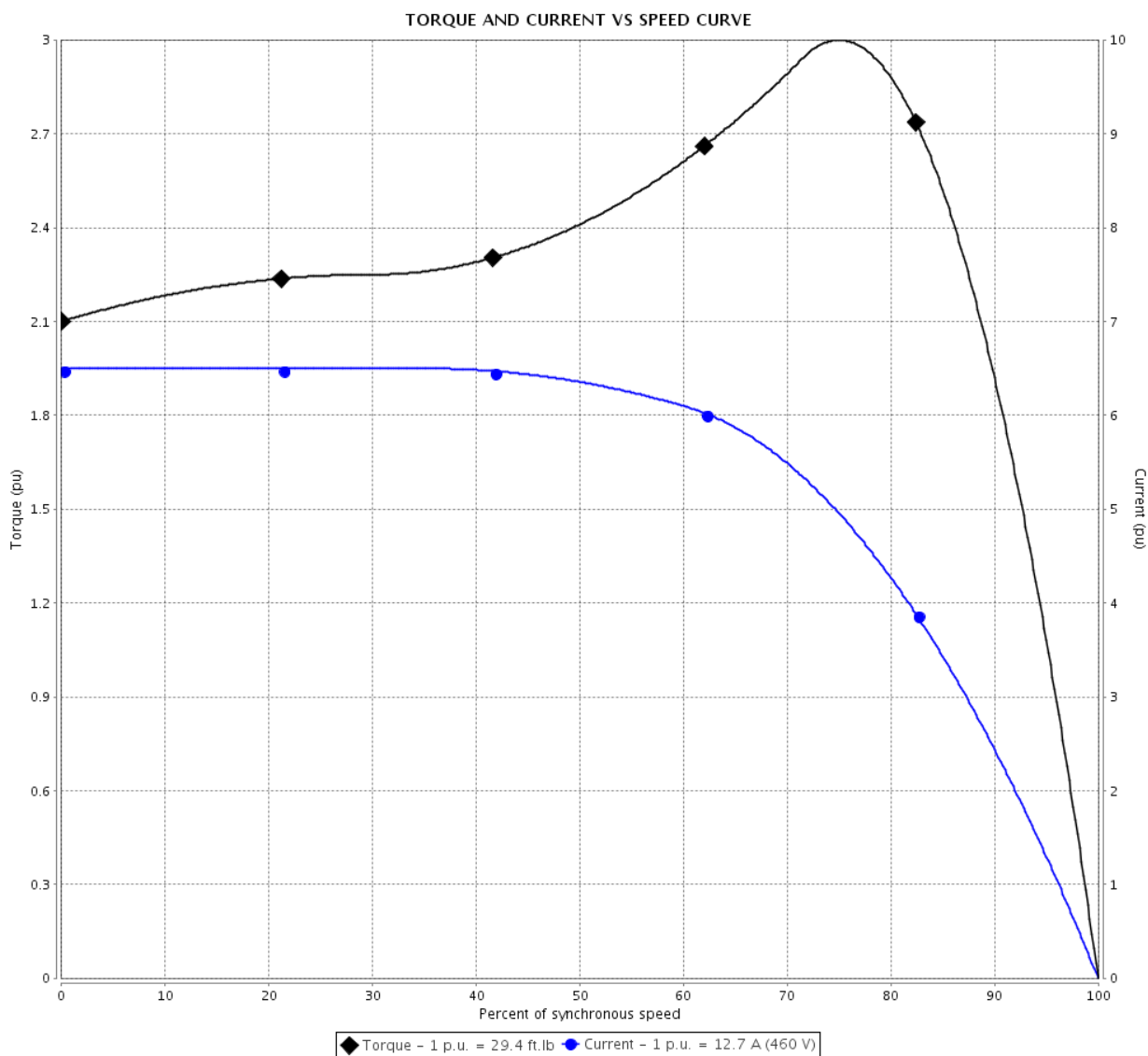
# TORQUE AND CURRENT VS SPEED CURVE



## Three Phase Induction Motor - Squirrel Cage

Customer : Dealers Industrial Equipment

Product line : W21 Explosion-proof Motor NEMA Premium Efficiency Three-Phase  
 Product code : 14284619  
 Catalog # : 01018XT3E215TC



Performance : 208-230/460 V 60 Hz 4P

Rated current : 28.1-25.4/12.7 A	Moment of inertia (J)
LRC : 6.5	Duty cycle : Cont.(S1)
Rated torque : 29.4 ft.lb	Insulation class : F
Locked rotor torque : 210 %	Service factor : 1.15
Breakdown torque : 300 %	Temperature rise : 80 K
Rated speed : 1765 rpm	Design : B

Locked rotor time : 27s (cold) 15s (hot)

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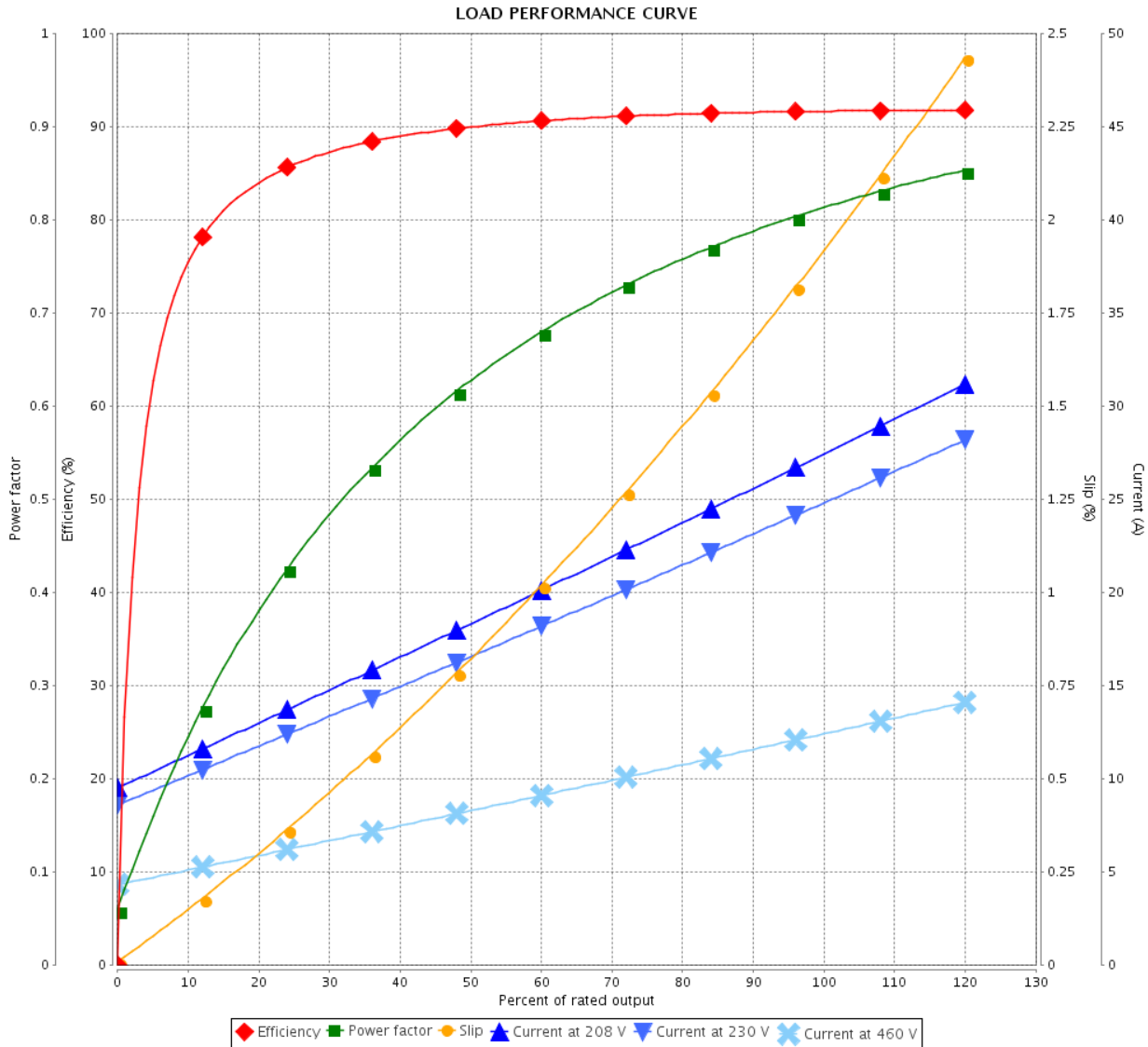
# LOAD PERFORMANCE CURVE

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Locked rotor torque : 210 %	Service factor : 1.15
Breakdown torque : 300 %	Temperature rise : 80 K
Rated speed : 1765 rpm	Design : B

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# THERMAL LIMIT CURVE



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Locked rotor torque : 210 %	Service factor : 1.15
Breakdown torque : 300 %	Temperature rise : 80 K
Rated speed : 1765 rpm	Design : B

Heating constant  
 Cooling constant

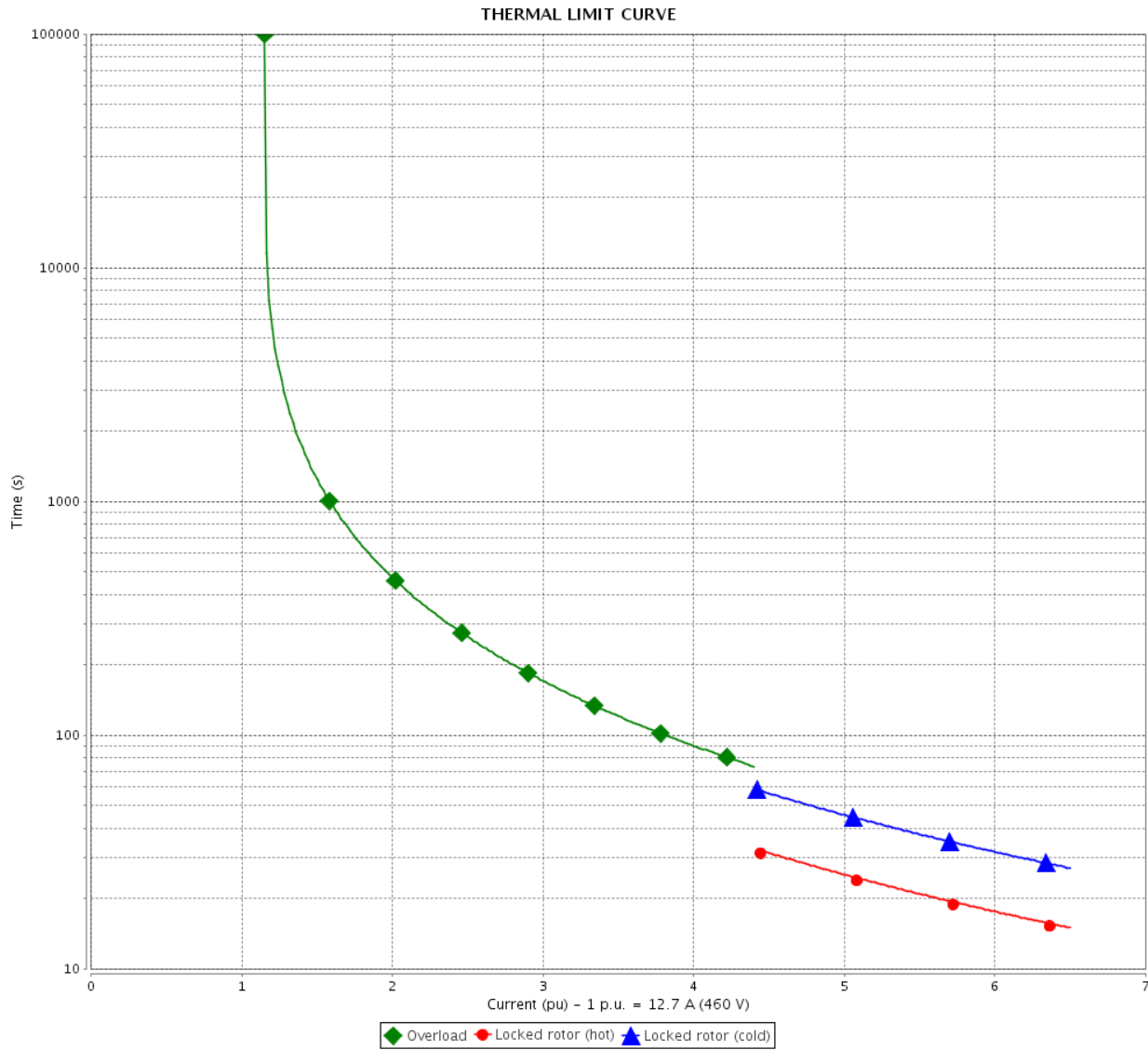
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : Dealers Industrial Equipment



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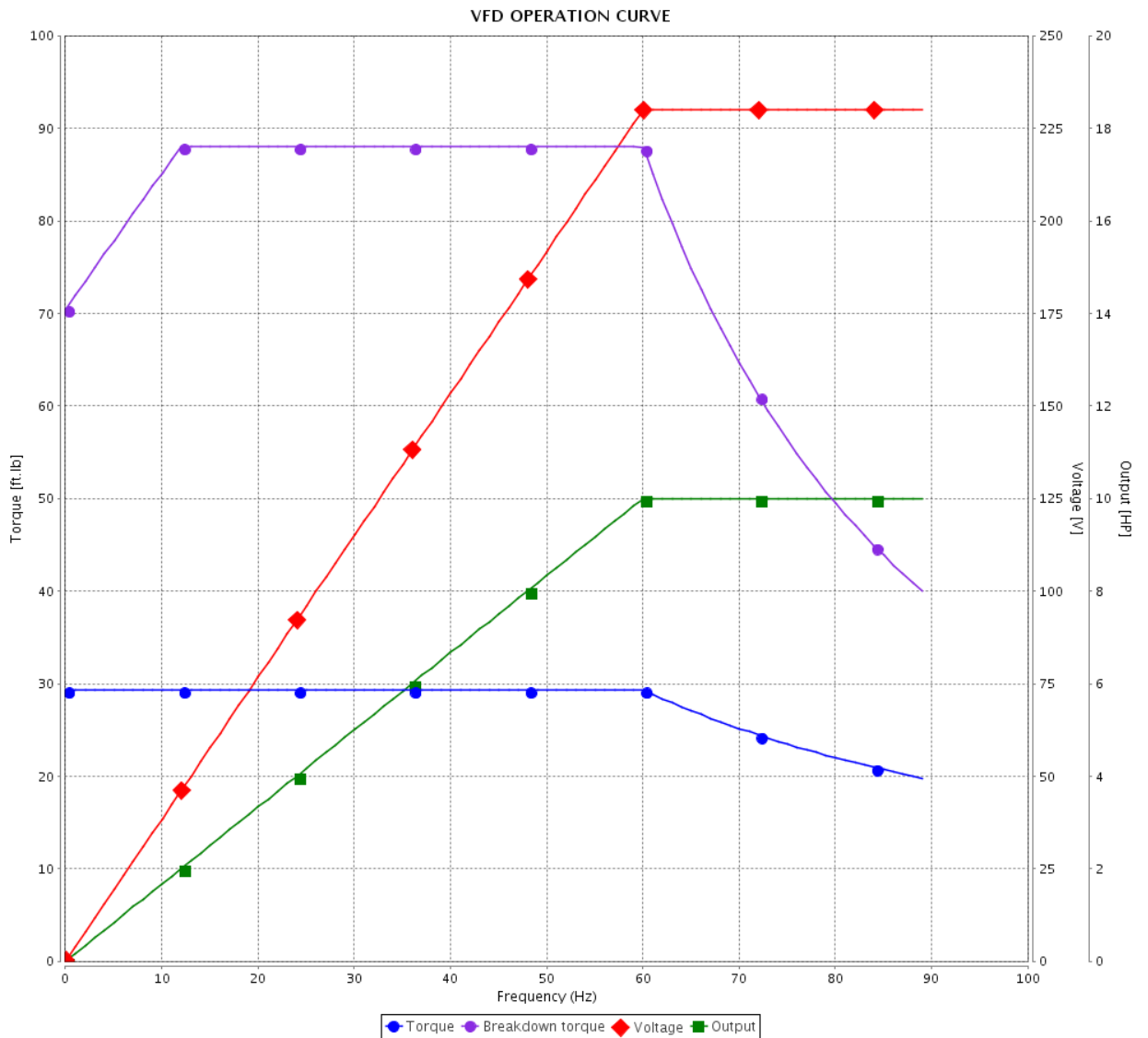
# VFD OPERATION CURVE

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Performance : 208-230/460 V 60 Hz 4P

Rated current : 28.1-25.4/12.7 A  
 LRC : 6.5  
 Rated torque : 29.4 ft.lb  
 Locked rotor torque : 210 %  
 Breakdown torque : 300 %  
 Rated speed : 1765 rpm

Moment of inertia (J)  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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