

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase Product code : 11816691

Frame	: 182/4TC	Locked rotor time	: 23s (cold) 13s (hot)
Output	: 5 HP (3.7 kW)	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 575 V	Altitude	: 1000 m.a.s.l.
Rated current	: 5.44 A	Protection degree	: IP55
L. R. Amperes	: 38.1 A	Cooling method	: IC411 - TEFC
LRC	: 7.0x(Code J)	Mounting	: F-1
No load current	: 3.00 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1750 rpm	Noise level ²	: 56.0 dB(A)
Slip	: 2.78 %	Starting method	: Direct On Line
Rated torque	: 15.0 ft.lb	Approx. weight ³	: 92.6 lb
Locked rotor torque	: 190 %		
Breakdown torque	: 260 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 0.3683 sq.ft.lb		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	86.5	87.5	87.5	Max. traction	: 200 lb
Power Factor	0.60	0.72	0.78	Max. compression	: 299 lb

Losses at normative operating points (speed;torque), in percentage of rated output power

P1 (0,9;1,0)	P2 (0,5;1,0)	P3 (0,25;1,0)	P4 (0,9;0,5)	P5 (0,5;0,5)	P6 (0,5;0,25)	P7 (0,25;0,25)
13.8	12.6	12.9	7.2	5.6	4.1	3.3

	Drive end	Non drive end
Bearing type	: 6207 ZZ	6206 ZZ
Sealing	: V'Ring	V'Ring
Lubrication interval	: -	-
Lubricant amount	: -	-
Lubricant type	: 00088	

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.

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date	21/07/2026			

Page 1 / 5
Revision

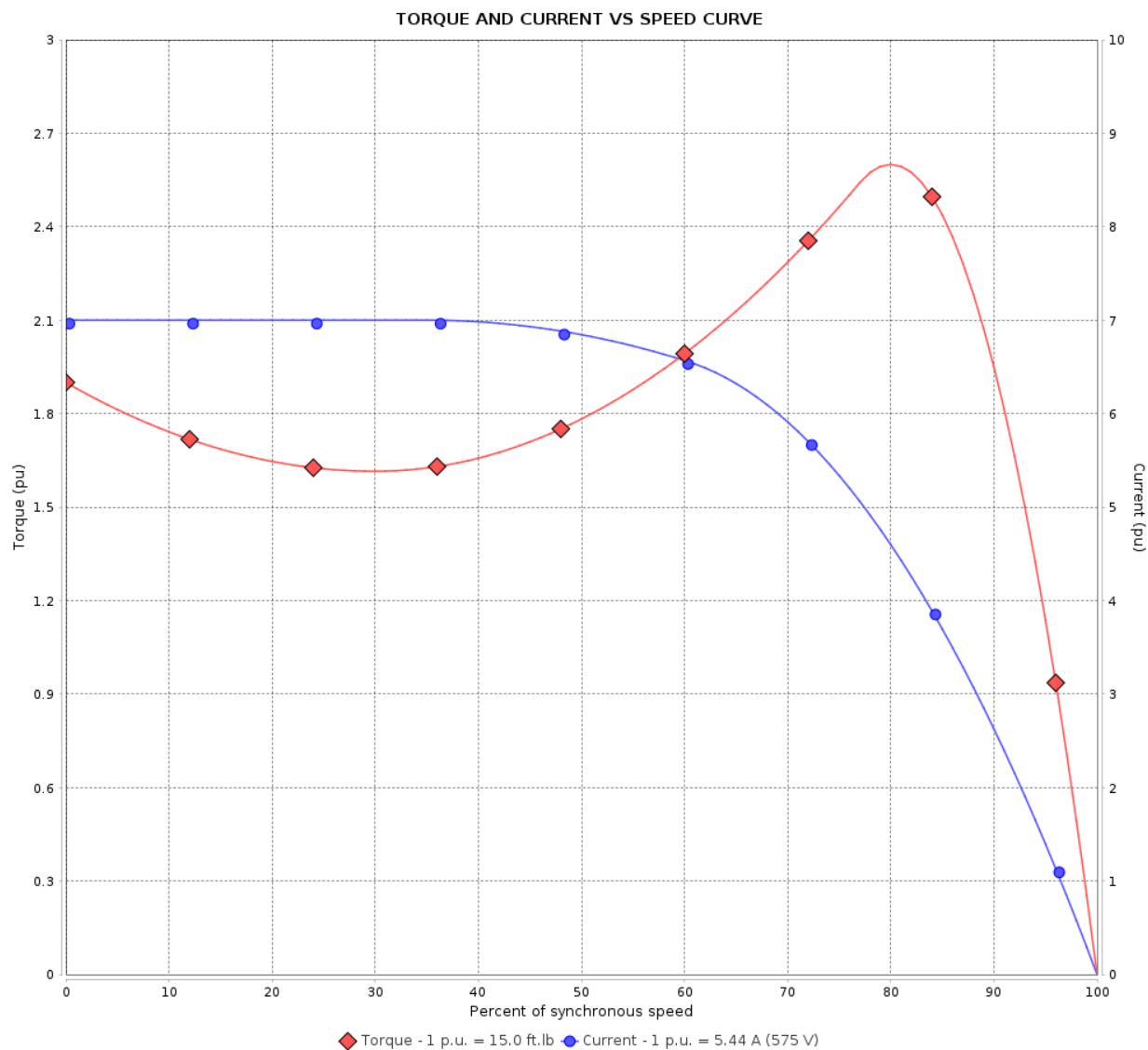
TORQUE AND CURRENT VS SPEED CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase Product code : 11816691



Performance : 575 V 60 Hz 4P

Rated current	: 5.44 A	Moment of inertia (J)	: 0.3683 sq.ft.lb
LRC	: 7.0	Duty cycle	: Cont.(S1)
Rated torque	: 15.0 ft.lb	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.25
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1750 rpm	Design	: B

Locked rotor time : 23s (cold) 13s (hot)

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 2 / 5Revision		
Checked by				
Date	21/07/2026			

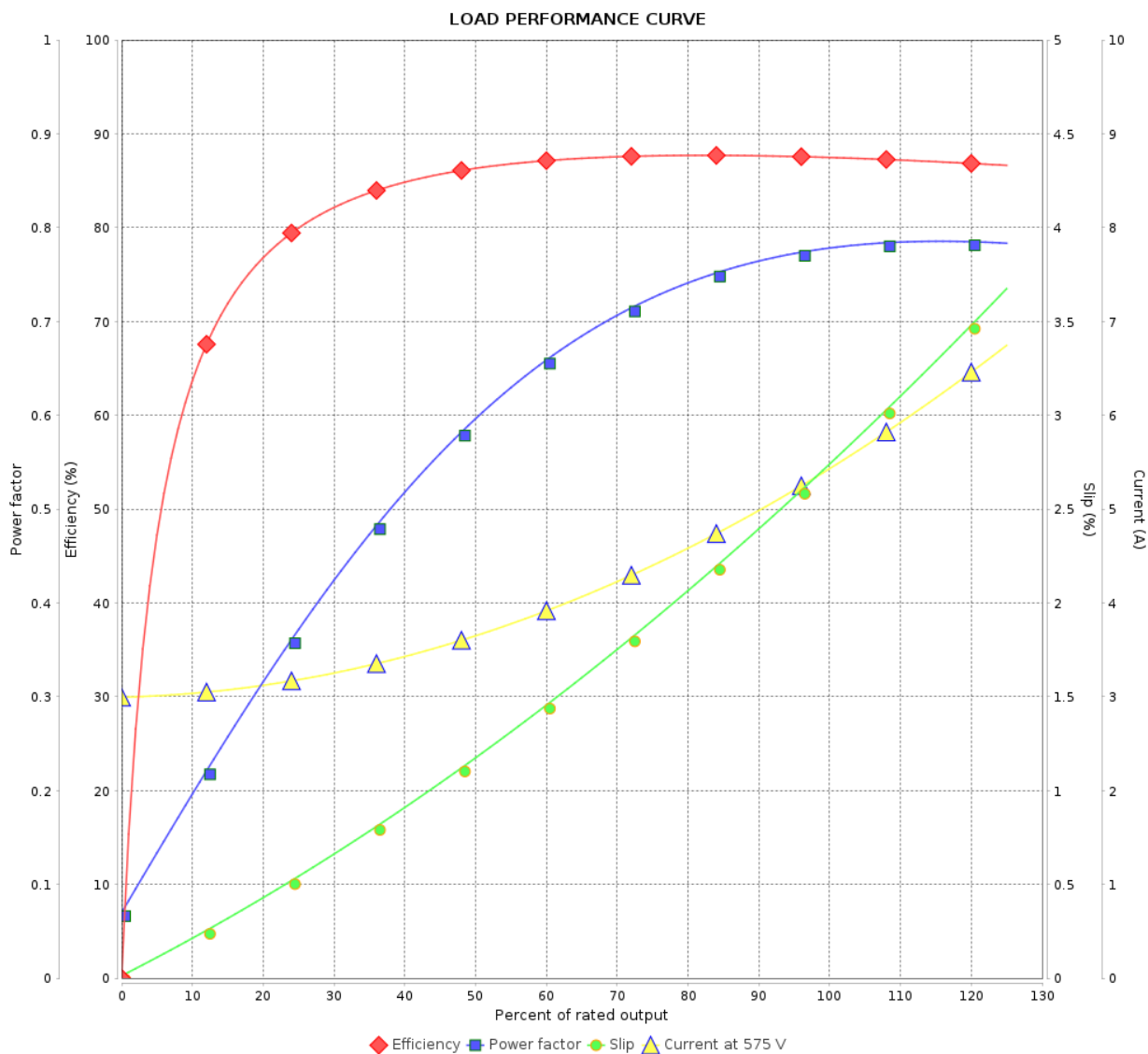
LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase Product code : 11816691



Performance : 575 V 60 Hz 4P

Rated current : 5.44 A
LRC : 7.0
Rated torque : 15.0 ft.lb
Locked rotor torque : 190 %
Breakdown torque : 260 %
Rated speed : 1750 rpm

Moment of inertia (J) : 0.3683 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date	21/07/2026			

Page 3 / 5
Revision

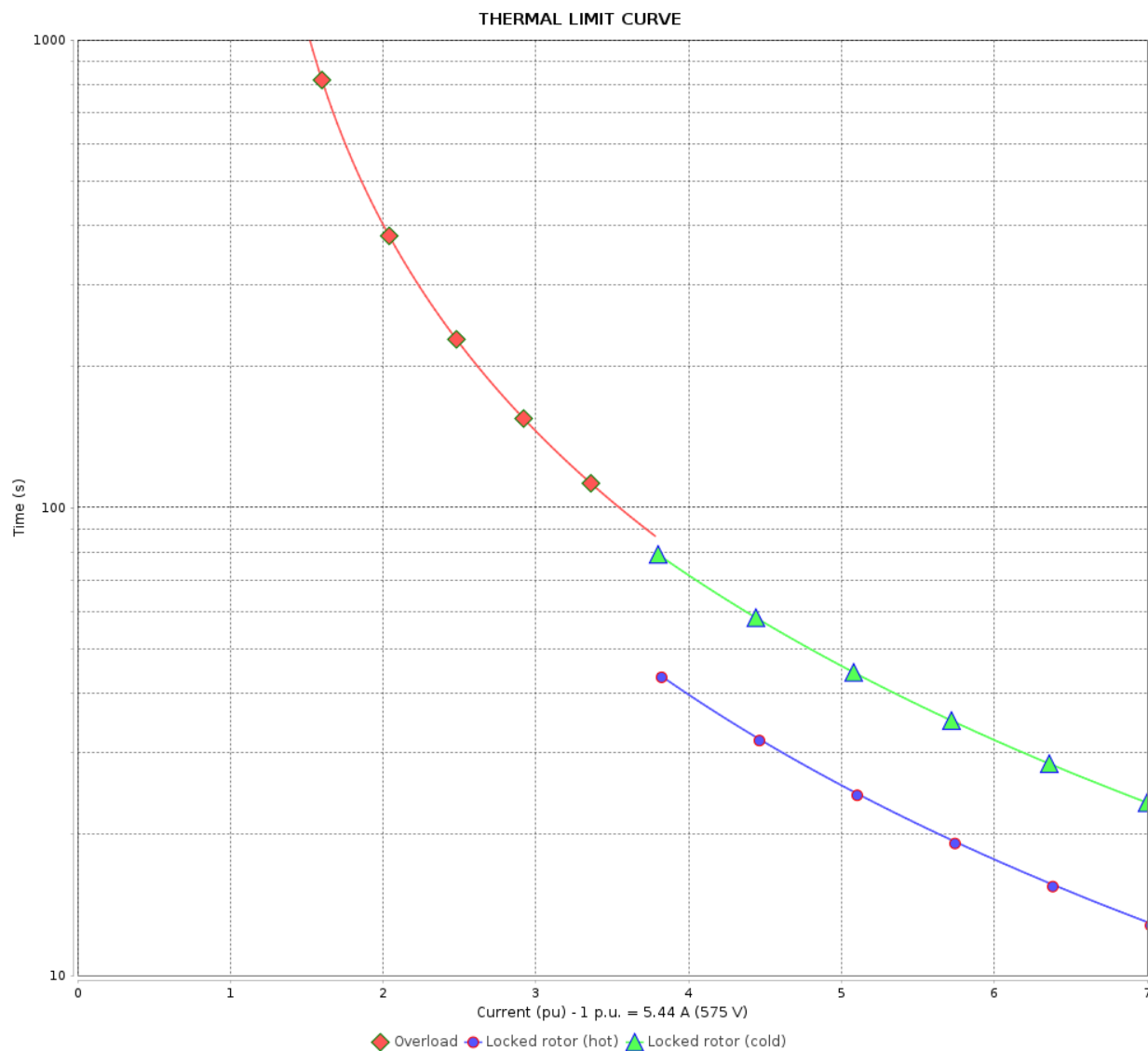
THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase Product code : 11816691



Performance : 575 V 60 Hz 4P

Rated current : 5.44 A
LRC : 7.0
Rated torque : 15.0 ft.lb
Locked rotor torque : 190 %
Breakdown torque : 260 %
Rated speed : 1750 rpm

Moment of inertia (J) : 0.3683 sq.ft.lb
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

Heating constant

Cooling constant

Rev.	Changes Summary		Performed	Checked	Date
Performed by		Page 4 / 5 Revision			
Checked by					
Date	21/07/2026				

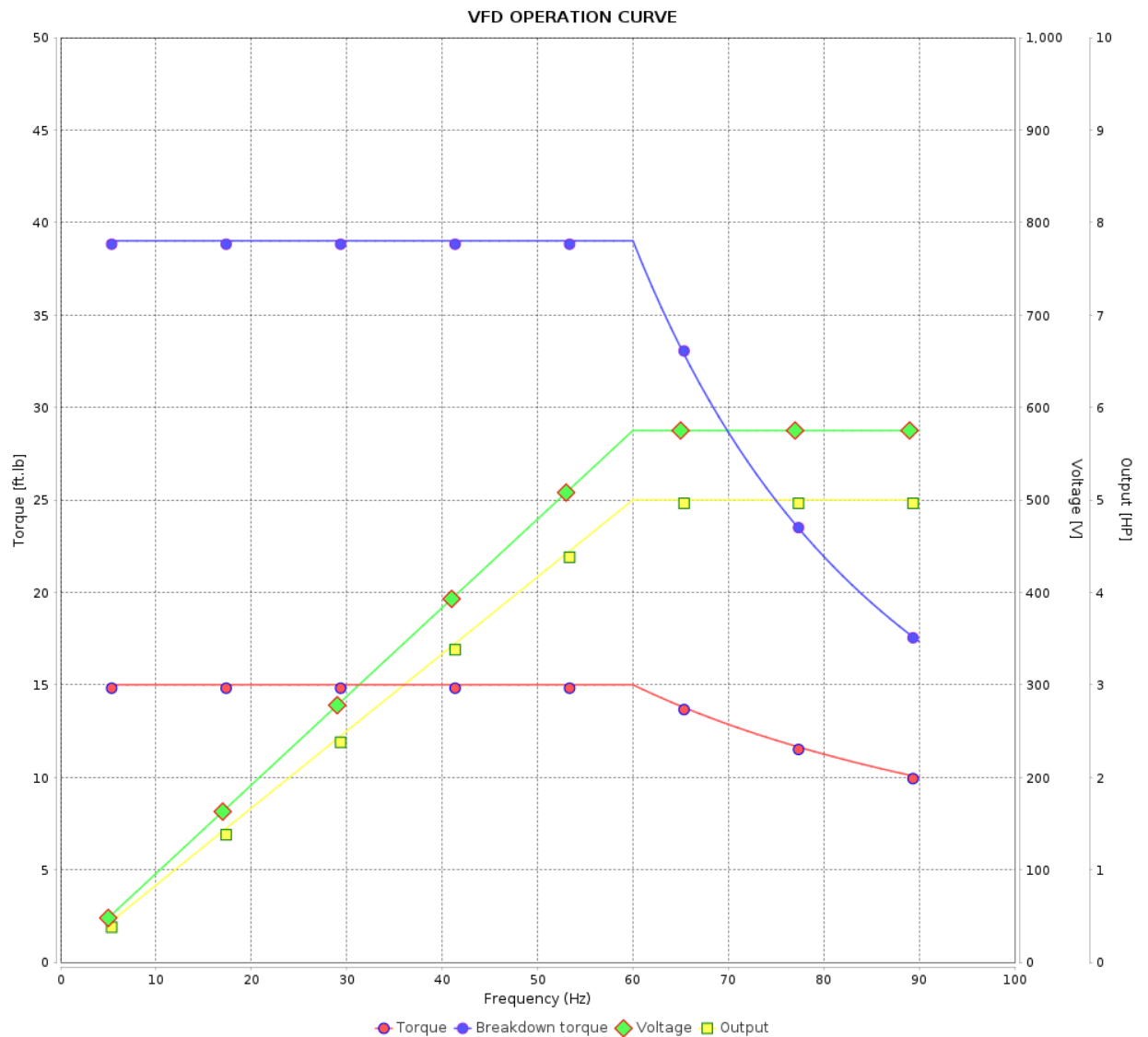
VFD OPERATION CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase Product code : 11816691



Performance : 575 V 60 Hz 4P

Rated current	: 5.44 A	Moment of inertia (J)	: 0.3683 sq.ft.lb
LRC	: 7.0	Duty cycle	: Cont.(S1)
Rated torque	: 15.0 ft.lb	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.25
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1750 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 5 / 5 Revision		
Checked by				
Date	21/07/2026			

