

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer					
Product line		: W22 NEMA Premium Efficiency Three-Phase	Product code :	12445774	
			Catalog # :	00509ET3E254T-W22	
Frame	: 254/6T	Cooling method	: IC411 - TEFC		
Insulation class	: F	Mounting	: F-1		
Duty cycle	: Cont.(S1)	Rotation <sup>1</sup>	: Both (CW and CCW)		
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line		
Altitude	: 1000 m.a.s.l.	Approx. weight <sup>2</sup>	: 265 lb		
Protection degree	: IP55	Moment of inertia (J)	: 3.41 sq.ft.lb		
Design	: B				
Output [HP]	5	5	5	5	5
Poles	8	8	8	8	8
Frequency [Hz]	60	50	50	50	50
Rated voltage [V]	208-230/460	380	400	415	415
Rated current [A]	16.8-15.2/7.58	8.84	8.56	8.48	8.48
L. R. Amperes [A]	88.8-80.3/40.2	38.0	40.2	42.4	42.4
LRC [A]	5.3x(Code H)	4.3x(Code F)	4.7x(Code F)	5.0x(Code G)	5.0x(Code G)
No load current [A]	7.76-9.00/4.50	4.45	4.75	4.95	4.95
Rated speed [RPM]	880	725	725	730	730
Slip [%]	2.22	3.33	3.33	2.67	2.67
Rated torque [ft.lb]	29.4	35.7	35.7	35.5	35.5
Locked rotor torque [%]	190	140	160	180	180
Breakdown torque [%]	250	190	210	229	229
Service factor	1.25	1.15	1.15	1.15	1.15
Temperature rise	80 K	105 K	80 K	80 K	80 K
Locked rotor time	79s (cold) 44s (hot)	59s (cold) 33s (hot)	59s (cold) 33s (hot)	59s (cold) 33s (hot)	59s (cold) 33s (hot)
Noise level <sup>2</sup>	54.0 dB(A)	51.0 dB(A)	51.0 dB(A)	51.0 dB(A)	51.0 dB(A)
Efficiency (%)	25%				
	50%	85.5	85.5	85.5	84.0
	75%	87.5	85.5	86.5	86.5
	100%	87.5	84.8	85.5	85.5
Power Factor	25%				
	50%	0.49	0.56	0.52	0.50
	75%	0.62	0.68	0.65	0.63
	100%	0.70	0.75	0.73	0.71
Bearing type	: <u>Drive end</u> 6309 C3 <u>Non drive end</u> 6209 C3	Foundation loads			
Sealing	: V'Ring V'Ring	Max. traction : 264 lb			
Lubrication interval	: 20000 h 20000 h	Max. compression : 529 lb			
Lubricant amount	: 13 g 9 g				
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.		
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	27/01/2018			1 / 1	