

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer							
Product line		: W22 NEMA Premium Efficiency Three-Phase		Product code :		11580967	
				Catalog # :		02012ET3E286TC-W22	
Frame		: 284/6TC		Cooling method		: IC411 - TEFC	
Insulation class		: F		Mounting		: F-1	
Duty cycle		: Cont.(S1)		Rotation ¹		: Both (CW and CCW)	
Ambient temperature		: -20°C to +40°C		Starting method		: Direct On Line	
Altitude		: 1000 m.a.s.l.		Approx. weight ²		: 430 lb	
Protection degree		: IP55		Moment of inertia (J)		: 9.16 sq.ft.lb	
Design		: B					
Output [HP]	20	15	15	15	20	20	20
Poles	6	6	6	6	6	6	6
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	208-230/460	380	400	415	380	400	415
Rated current [A]	53.5-48.4/24.2	21.8	21.2	21.3	29.6	28.1	27.2
L. R. Amperes [A]	332-300/150	135	146	155	139	149	155
LRC [A]	6.2x(Code G)	6.2x(Code G)	6.9x(Code H)	7.3x(Code J)	4.7x(Code E)	5.3x(Code F)	5.7x(Code F)
No load current [A]	16.4-19.0/9.50	9.40	10.0	10.6	9.40	10.0	10.6
Rated speed [RPM]	1175	975	975	980	965	970	975
Slip [%]	2.08	2.50	2.50	2.00	3.50	3.00	2.50
Rated torque [ft.lb]	88.2	79.7	79.7	79.3	107	107	106
Locked rotor torque [%]	229	229	270	280	170	200	210
Breakdown torque [%]	260	270	290	320	200	220	240
Service factor	1.25	1.00	1.15	1.15	1.00	1.15	1.15
Temperature rise	80 K	80 K	80 K	80 K	105 K	105 K	80 K
Locked rotor time	28s (cold)	21s (cold)	21s (cold)	21s (cold)	21s (cold)	21s (cold)	21s (cold)
	16s (hot)	12s (hot)	12s (hot)	12s (hot)	12s (hot)	12s (hot)	12s (hot)
Noise level ²	59.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)
Efficiency (%)	25%	90.8	89.8	89.0	88.9	91.5	90.6
	50%	91.0	90.0	89.3	89.3	90.2	90.2
	75%	91.7	90.3	90.3	90.6	90.2	90.2
	100%	91.7	90.3	90.3	90.8	88.5	89.5
Power Factor	25%	0.44	0.41	0.38	0.36	0.51	0.47
	50%	0.70	0.66	0.63	0.60	0.76	0.73
	75%	0.80	0.79	0.76	0.73	0.84	0.82
	100%	0.85	0.85	0.83	0.81	0.87	0.86
Bearing type	Drive end		Non drive end		Foundation loads		
	: 6311 C3		: 6211 C3		Max. traction : 912 lb		
Sealing	: V'Ring		: V'Ring		Max. compression : 1342 lb		
Lubrication interval	: 20000 h		: 20000 h				
Lubricant amount	: 18 g		: 11 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	24/01/2018				1 / 1		