

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line		: W21 Flameproof Motor NEMA Premium Efficiency Three-Phase		Product code :	11342133
				Catalog # :	02012XT3E286T
Frame	: 286T	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	: 506 lb		
Protection degree	: IP55	Moment of inertia (J)	: 8.02 sq.ft.lb		
Design	: B				
Output [HP]	20	20	20	20	20
Poles	6	6	6	6	6
Frequency [Hz]	60	50	50	50	50
Rated voltage [V]	208-230/460	380	400	415	415
Rated current [A]	53.5-48.4/24.2	28.9	27.9	27.2	27.2
L. R. Amperes [A]	385-348/174	173	184	193	193
LRC [A]	7.2x(Code H)	6.0x(Code G)	6.6x(Code H)	7.1x(Code H)	7.1x(Code H)
No load current [A]	15.2-17.6/8.80	8.30	9.00	9.60	9.60
Rated speed [RPM]	1180	970	975	975	975
Slip [%]	1.67	3.00	2.50	2.50	2.50
Rated torque [ft.lb]	87.8	107	106	106	106
Locked rotor torque [%]	250	190	220	240	240
Breakdown torque [%]	270	210	240	260	260
Service factor	1.15	1.00	1.00	1.00	1.00
Temperature rise	80 K	80 K	80 K	80 K	80 K
Locked rotor time	39s (cold) 22s (hot)	45s (cold) 25s (hot)	45s (cold) 25s (hot)	45s (cold) 25s (hot)	45s (cold) 25s (hot)
Noise level ²	59.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)
Efficiency (%)	25%	91.6	91.3	90.7	89.9
	50%	91.7	90.2	90.2	89.5
	75%	91.7	91.0	91.0	91.0
	100%	91.7	89.5	90.2	90.2
Power Factor	25%	0.45	0.52	0.49	0.46
	50%	0.70	0.76	0.73	0.70
	75%	0.80	0.84	0.82	0.80
	100%	0.85	0.88	0.86	0.85
Bearing type	: Drive end : 6311 Non drive end : 6211	2RS C3	2RS C3	Foundation loads	
Sealing	: Oil Seal	Lip Seal	Max. traction : 968 lb		
Lubrication interval	: -	-	Max. compression : 1474 lb		
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	130 °C
2	Winding	Thermostat - 2 wires	1 x Phase	155 °C

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