

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 High Efficiency Three-Phase

Product code :

12822573

Catalog # :

03018EP3ER286TC-W22

Frame : 286TC
Output : 30 HP (22 kW)
Poles : 4
Frequency : 60 Hz
Rated voltage : 230/460 V
Rated current : 68.6/34.3 A
L. R. Amperes : 432/216 A
LRC : 6.3x(Code G)
No load current : 21.4/10.7 A
Rated speed : 1765 rpm
Slip : 1.94 %
Rated torque : 89.3 ft.lb
Locked rotor torque : 210 %
Breakdown torque : 250 %
Insulation class : F
Service factor : 1.25
Moment of inertia (J) : 5.32 sq.ft.lb
Design : B

Locked rotor time : 34s (cold) 19s (hot)
Temperature rise : 80 K
Duty cycle : Cont.(S1)
Ambient temperature : -20°C to +40°C
Altitude : 1000 m.a.s.l.
Protection degree : IP55
Cooling method : IC411 - TEFC
Mounting : W-6
Rotation¹ : Both (CW and CCW)
Noise level² : 64.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 424 lb

Output	25%		50%		75%		100%	
Efficiency (%)	92.7	94.2	92.4	92.4	93.0	91.7	92.4	89.5
	94.2	93.5	92.4	92.4	92.4	92.4	90.2	91.0
Power Factor	0.50	0.56	0.74	0.79	0.83	0.86	0.87	0.88
	0.52	0.50	0.76	0.74	0.84	0.83	0.87	0.87

Foundation loads
Max. traction : 823 lb
Max. compression : 1247 lb

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

Losses (%)	P1 (0,9;1,0)	8.0	11.4	10.6	9.6
	P2 (0,5;1,0)	6.9	9.8	9.1	8.3
	P3 (0,25;1,0)	6.3	9.0	8.3	7.6
	P4 (0,9;0,5)	3.5	4.9	4.6	4.2
	P5 (0,5;0,5)	2.4	3.4	3.1	2.9
	P6 (0,5;0,25)	1.4	2.0	1.8	1.7
	P7 (0,25;0,25)	0.9	1.4	1.3	1.1

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6311 C3	6211 C3
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	15000 h	17000 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				
Date	28/03/2024		Page 1 / 1	Revision