

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 11584390
Catalog # : 01509ST3QIE286T-W22

Frame	: 284/6T	Locked rotor time	: 45s (cold) 25s (hot)
Output	: 15 HP (11 kW)	Temperature rise	: 80 K
Poles	: 8	Duty cycle	: Cont.(S1)
Frequency	: 60 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 460 V	Altitude	: 1000 m.a.s.l.
Rated current	: 19.6 A	Protection degree	: IP56
L. R. Amperes	: 108 A	Cooling method	: IC411 - TEFC
LRC	: 5.5x(Code G)	Mounting	: F-1
No load current	: 9.80 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 880 rpm	Noise level ²	: 54.0 dB(A)
Slip	: 2.22 %	Starting method	: Direct On Line
Rated torque	: 89.5 ft.lb	Approx. weight ³	: 421 lb
Locked rotor torque	: 200 %		
Breakdown torque	: 229 %		
Insulation class	: F		
Service factor	: 1.25		
Moment of inertia (J)	: 8.18 sq.ft.lb		
Design	: B		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	85.5	90.0	90.2	Max. traction	: 825 lb
Power Factor	0.62	0.72	0.78	Max. compression	: 1246 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)
10.3	8.2	7.6	5.5	3.7	2.7	1.8

	<u>Drive end</u>	<u>Non drive end</u>
Bearing type	: 6311 C3	: 6211 C3
Sealing	: Inpro/Seal	: Inpro/Seal
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				
Date	11/03/2025		Page 1 / 1	Revision

MADE IN BRAZIL
11584390



NEMA
Premium
W22

MODEL 01509ST3QIE286T-W22



Inverter Duty Motor
Severe Duty

PH3 60Hz Fr. 284/6T 1000m.a.s.l. IP56 TEFC 384lb

V 460

A 20.0

HP 15

kW 11

SF 1.25

SFA 25.0

RPM 880

PF 0.77

AMB 40°C

INS cl. F DT80K

NEMA NOM EFF 89.5%

DUTY CONT.

DES B Code G

GUARANT. EFF 87.5%



FOR SAFE AREA
Mod.TE1BFOXON
CC029A



Class I, Div 2, Gr A, B, C, D, 1.15SF - T3
Class I, Zone 2, IIC, 1.15SF - T3
Class II, Div 2, Gr F, G - T4
For use on PWM: Gr. A, B, C, D, F,
VT 1000:1, CT 20:1, 1.00SF - T3A

T1 T2 T3
L1 L2 L3

460V



→ 6311-C3 (18g) 55BC03X30

→ 6211-C3 (11g) 55BC02X30



MOBIL POLYREX EM (20000h)

