

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22Xdb Flameproof - Standard Efficiency IE1 Multivoltage Product code : 16076877

Frame	: 180M/L	Cooling method	: TEFC-XP
Insulation class	: F	Mounting	: B3T
Duty cycle	: S1	Direct of rotation ¹	: Both
Ambient temperature	: -20 °C to +40 °C	Starting method	: Direct On Line
Altitude	: 1000 m.a.s.l	Approx. weight ³	: 259 kg
Degree of protection	: IP56	Moment of inertia (J)	: 0.0975 kgm ²
Design	: N		

Output	22 kW (30 HP)	22 kW (30 HP)	22 kW (30 HP)
Poles	2	2	2
Frequency	50 Hz	50 Hz	50 Hz
Rated voltage	380/660 V	400/690 V	415 V
Rated current	41.6/24.0 A	39.7/23.0 A	38.7 A
L. R. Amperes	304/175 A	318/184 A	329 A
LRC (p.u.)	7.3	8.0	8.5
No load current	11.5/6.62 A	13.0/7.54 A	14.4 A
Rated speed	2950 rpm	2955 rpm	2960 rpm
Slip	1.67 %	1.50 %	1.33 %
Rated torque	7.26 kgfm	7.25 kgfm	7.24 kgfm
Locked rotor torque	270 %	300 %	320 %
Breakdown torque	290 %	320 %	350 %
Service factor	1.00	1.00	1.00
Noise level ²	67.0 dB(A)	67.0 dB(A)	67.0 dB(A)
Locked rotor time	7 s (hot) 13 s (cold)	7 s (hot) 13 s (cold)	7 s (hot) 13 s (cold)
Efficiency (%)	50%	90.9	90.7
	75%	90.8	91.0
	100%	90.3	90.8
Power factor	Start	0.45	0.45
	50%	0.80	0.76
	75%	0.86	0.84
	100%	0.89	0.88

	Drive end	Non drive end	Foundation loads
Bearing type	6311-C3	6309-C3	Maximum traction : 234 kgf
Lubrication interval	17000 h	20000 h	Maximum compression : 493 kgf
Lubricant amount	18 g	13 g	
Lubricant type	MOBIL POLYREX EM		

FOR APPROVAL
 () Approved
 () Approved with comments
 () Not approved

This revision replaces and cancels the previous one, which must be eliminated.

- (1) When viewed from the drive end.
 (2) Measured at 1m and with tolerance of +3dB(A).
 (3) Approximate weight subject to changes after manufacturing process.
 (4) At the rated point.

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in IEC 60034-1.

Rev.	Summary of changes	Performed	Checked	Date
Checked by	AUTOMATICO		192139/2021-A	
Date	13/07/2021		Page 3/2	Revision 0