

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22Xec IE2 Three-Phase

Product code : 14352810

Area classification : ZONA 2/22, GRUPO IIC/IIIB, T3(200 °C)/
T125 °C

Catalog # : E16036EP3YAX315SMF3W

Frame : 315S/M
Output : 160 kW (220 HP)
Poles : 2
Frequency : 50 Hz
Rated voltage : 380/660 V
Rated current : 287/165 A
L. R. Amperes : 2066/1190 A
LRC : 7.2
No load current : 65.5/37.7 A
Rated speed : 2970 rpm
Slip : 1.00 %
Rated torque : 380 ft.lb
Locked rotor torque : 200 %
Breakdown torque : 260 %
Insulation class : F
Service factor : 1.00
Moment of inertia (J) : 53.3 sq.ft.lb
Design : N

Locked rotor time : 68s (cold) 38s (hot)
Temperature rise : 80 K
Duty cycle : S1
Ambient temperature : -20°C to +40°C
Altitude : 1000 m.a.s.l.
Protection degree : IP55
Cooling method : IC411 - TEFC
Mounting : B3T
Rotation¹ : Both (CW and CCW)
Noise level² : 77.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 2624 lb

Output	25%		50%		75%		100%	
Efficiency (%)	94.8	94.7	94.9	94.8	95.2	95.3	95.2	95.3
	94.6	89.6	94.7	91.0	95.3	93.6	95.3	95.0
Power Factor	0.61	0.56	0.83	0.80	0.88	0.87	0.89	0.89
	0.54	0.54	0.78	0.77	0.86	0.86	0.88	0.88

Foundation loads
Max. traction : 1108 lb
Max. compression : 3732 lb

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

Losses (%)	P1 (0,9;1,0)	4.9	4.8	4.8	5.1
	P2 (0,5;1,0)	3.6	3.5	3.5	3.8
	P3 (0,25;1,0)	3.1	3.1	3.1	3.3
	P4 (0,9;0,5)	2.8	2.7	2.7	2.9
	P5 (0,5;0,5)	1.6	1.5	1.5	1.6
	P6 (0,5;0,25)	1.1	1.1	1.1	1.1
	P7 (0,25;0,25)	0.6	0.6	0.6	0.6

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6314 C3	6314 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	5000 h	5000 h
Lubricant amount	:	27 g	27 g
Lubricant type	:	Mobil Polyrex EM	

Notes:

EAC
TC RU C-BR.AA87.B.00977/22
2Ex ec IIC T3 Gc X
Ex tc IIIB T125°C Dc X
ООО «НАИО ЛЦБЭ»
IECEX
IECEX BAS 10.0099X
Ex ec IIC T3 Gc
Ex tc IIIB T125°C Dc

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 1 / 3		
Checked by				
Date	26/03/2024			
		Revision		

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Rev.	Changes Summary		Performed	Checked	Date
Performed by			Page		Revision
Checked by					
Date	26/03/2024				

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermistor - 2 wires	1 x Phase	140 °C
2	Winding	Thermistor - 2 wires	1 x Phase	155 °C

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page	Revision
Checked by				3 / 3	
Date	26/03/2024				