

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22Xdb IE3 Three-Phase

Product code : 12383834

Area classification : ZONA 1, GRUPO IIB, T4 (135 °C)

Catalog # : E16018XT3YAX315SMF3W

Frame	: 315S/M	Locked rotor time	: 50s (cold) 28s (hot)
Output	: 160 kW (220 HP)	Temperature rise	: 80 K
Poles	: 4	Duty cycle	: S1
Frequency	: 50 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 380/660 V	Altitude	: 1000 m.a.s.l.
Rated current	: 292/168 A	Protection degree	: IP56
L. R. Amperes	: 1898/1093 A	Cooling method	: IC411 - TEFC
LRC	: 6.5	Mounting	: B3T
No load current	: 92.1/53.0 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1490 rpm	Noise level ²	: 71.0 dB(A)
Slip	: 0.67 %	Starting method	: Direct On Line
Rated torque	: 757 ft.lb	Approx. weight ³	: 3058 lb
Locked rotor torque	: 229 %		
Breakdown torque	: 250 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 94.6 sq.ft.lb		
Design	: N		

Output	25%		50%		75%		100%		Foundation loads	
Efficiency (%)	95.6	95.0	95.7	95.2	95.8	95.9	95.8	96.0	Max. traction	: 3005 lb
	95.2	94.1	95.3	94.7	95.8	95.7	95.8	96.2		
Power Factor	0.52	0.48	0.77	0.74	0.84	0.82	0.87	0.86	Max. compression	: 6063 lb
	0.45	0.46	0.71	0.72	0.81	0.81	0.85	0.85		

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

Losses (%)	P1 (0,9;1,0)	4.5	4.2	4.5	4.0
	P2 (0,5;1,0)	3.5	3.3	3.5	3.1
	P3 (0,25;1,0)	3.0	2.8	3.0	2.7
	P4 (0,9;0,5)	2.4	2.3	2.4	2.1
	P5 (0,5;0,5)	1.5	1.4	1.5	1.4
	P6 (0,5;0,25)	1.1	1.0	1.1	1.0
	P7 (0,25;0,25)	0.6	0.6	0.6	0.6

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6319 C3	6316 C3
Sealing	:	Viton Oil Seal	Viton Oil Seal
Lubrication interval	:	11000 h	13000 h
Lubricant amount	:	45 g	34 g
Lubricant type	:	Mobil Polyrex EM	

Notes:

ATEX
 INERIS 16ATEX0036X
 CML 21UKEX1315X
 II 2G Ex db IIB T4 Gb
 EAC
 EAЭC RU C-BR.AA87.B.00379/20
 1Ex db IIB T4 Gb X
 ООО «НАННО ЦСВЭ»
 IECEX
 IECEX INE 16.0044X
 Ex db IIB T4 Gb

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 1 / 3		
Checked by				
Date	27/03/2024			
			Revision	

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Rev.	Changes Summary		Performed	Checked	Date
Performed by				Page 2 / 3	Revision
Checked by					
Date	27/03/2024				

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	150 °C

Space heater information

Voltage: 200 - 240 V

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 3 / 3		Revision
Checked by				
Date	27/03/2024			