

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22Xec IE3 Three-Phase

Product code :

12861115

Catalog # :

E01536ET3YAX160MF3-W

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

Frame : 160M
Output : 15 kW (20 HP)
Poles : 2
Frequency : 50 Hz
Rated voltage : 380/660 V
Rated current : 28.5/16.4 A
L. R. Amperes : 222/128 A
LRC : 7.8
No load current : 10.0/5.76 A
Rated speed : 2945 rpm
Slip : 1.83 %
Rated torque : 35.9 ft.lb
Locked rotor torque : 250 %
Breakdown torque : 320 %
Insulation class : F
Service factor : 1.00
Moment of inertia (J) : 1.31 sq.ft.lb
Design : N

Locked rotor time : 14s (cold) 8s (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 : 67.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 305 lb

Output	50%	75%	100%
Efficiency (%)	91.0 90.9	91.6 91.8	91.9 92.0
	90.3 89.7	91.6 91.5	91.9 91.7
Power Factor	0.72 0.67	0.82 0.79	0.87 0.85
	0.63 0.66	0.76 0.78	0.82 0.83

Foundation loads
Max. traction : 461 lb
Max. compression : 764 lb

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

Losses (%)	P1 (0,9;1,0)	8.6	8.5	8.6	8.8
	P2 (0,5;1,0)	7.4	7.3	7.4	7.6
	P3 (0,25;1,0)	7.1	7.0	7.1	7.3
	P4 (0,9;0,5)	4.2	4.1	4.2	4.3
	P5 (0,5;0,5)	2.8	2.8	2.8	2.9
	P6 (0,5;0,25)	1.8	1.8	1.8	1.9
	P7 (0,25;0,25)	1.3	1.3	1.3	1.3

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6309 C3	6209 C3
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	13 g	9 g
Lubricant type	:	Mobil Polyrex EM	

Notes:

ATEX
Baseefa 10ATEX0192X
BAS21UKEX0284X
II 3G Ex ec IIC T3 Gc
II 3D Ex tc IIIB T125°C Dc
EAC
TC RU C-BR.AA87.B.00977/22
2Ex ec IIC T3 Gc X
Ex tc IIIB T125°C Dc X
OOO «НАННО ЛЦБЭ»
IECEX

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Customer :

IECEX BAS 10.0099X
Ex ec IIC T3 Gc
Ex tc IIIB T125°C Dc

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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

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