

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22Xec IE3 Three-Phase

Product code : 14351821

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

Catalog # : E01518ET3YAX160LF3-W

Frame : 160L
Output : 15 kW (20 HP)
Poles : 4
Frequency : 50 Hz
Rated voltage : 380/660 V
Rated current : 29.1/16.8 A
L. R. Amperes : 192/111 A
LRC : 6.6
No load current : 12.0/6.91 A
Rated speed : 1470 rpm
Slip : 2.00 %
Rated torque : 71.9 ft.lb
Locked rotor torque : 240 %
Breakdown torque : 260 %
Insulation class : F
Service factor : 1.00
Moment of inertia (J) : 3.64 sq.ft.lb
Design : N

Locked rotor time : 19s (cold) 11s (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 : 61.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 327 lb

Output	25%		50%		75%		100%	
Efficiency (%)	92.2	92.0	92.1	92.0	92.4	92.5	92.1	92.3
	91.4	91.8	91.4	92.0	92.3	92.9	92.1	93.0
Power Factor	0.44	0.40	0.70	0.66	0.80	0.77	0.85	0.83
	0.37	0.37	0.62	0.63	0.75	0.75	0.81	0.81

Foundation loads
Max. traction : 772 lb
Max. compression : 1109 lb

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

Losses (%)	P1 (0,9;1,0)	8.5	8.2	8.5	7.4
	P2 (0,5;1,0)	7.5	7.3	7.5	6.6
	P3 (0,25;1,0)	7.2	7.0	7.2	6.3
	P4 (0,9;0,5)	3.9	3.8	3.9	3.4
	P5 (0,5;0,5)	2.9	2.8	2.9	2.5
	P6 (0,5;0,25)	1.8	1.8	1.8	1.6
	P7 (0,25;0,25)	1.4	1.3	1.4	1.2

		<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
ООО «НАИО ЛЦБЭ»
IECEX
IECEX BAS 10.0099X

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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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