

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22Xec IE2 Three-Phase

Product code : 14351883

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

Catalog # : E04512EP3YAX280SMF3W

Frame : 280S/M
Output : 45 kW (60 HP)
Poles : 6
Frequency : 50 Hz
Rated voltage : 380/660 V
Rated current : 89.6/51.6 A
L. R. Amperes : 511/294 A
LRC : 5.7
No load current : 33.0/19.0 A
Rated speed : 986 rpm
Slip : 1.40 %
Rated torque : 322 ft.lb
Locked rotor torque : 180 %
Breakdown torque : 220 %
Insulation class : F
Service factor : 1.00
Moment of inertia (J) : 48.0 sq.ft.lb
Design : N

Locked rotor time : 46s (cold) 26s (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 : 65.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 1314 lb

Output	25%		50%		75%		100%	
Efficiency (%)	94.1	93.5	93.7	93.4	93.6	93.6	93.1	93.4
	93.0	92.2	93.1	92.4	93.5	93.6	93.5	93.6
Power Factor	0.45	0.41	0.69	0.65	0.79	0.76	0.82	0.81
	0.38	0.39	0.62	0.63	0.74	0.75	0.79	0.80

Foundation loads
Max. traction : 1334 lb
Max. compression : 2649 lb

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

Losses (%)	P1 (0,9;1,0)	7.0	6.7	6.6	6.5
	P2 (0,5;1,0)	5.6	5.3	5.3	5.2
	P3 (0,25;1,0)	5.3	5.1	5.0	4.9
	P4 (0,9;0,5)	3.4	3.3	3.2	3.2
	P5 (0,5;0,5)	2.2	2.1	2.1	2.0
	P6 (0,5;0,25)	1.4	1.4	1.3	1.3
	P7 (0,25;0,25)	0.9	0.9	0.9	0.9

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6316 C3	6316 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	18000 h	18000 h
Lubricant amount	:	34 g	34 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

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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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