

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22Xec IE2 Three-Phase

Product code : 12384136

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

Catalog # : E07518EP3YAX280SMF3W

Frame : 280S/M
Output : 75 kW (100 HP)
Poles : 4
Frequency : 50 Hz
Rated voltage : 380/660 V
Rated current : 142/81.8 A
L. R. Amperes : 951/548 A
LRC : 6.7
No load current : 43.0/24.8 A
Rated speed : 1486 rpm
Slip : 0.93 %
Rated torque : 356 ft.lb
Locked rotor torque : 190 %
Breakdown torque : 229 %
Insulation class : F
Service factor : 1.00
Moment of inertia (J) : 39.0 sq.ft.lb
Design : N

Locked rotor time : 36s (cold) 20s (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 : 71.0 dB(A)
Starting method : Direct On Line
Approx. weight³ : 1472 lb

Output	25%		50%		75%		100%	
Efficiency (%)	93.5	93.7	93.8	93.8	94.0	94.4	94.2	94.4
	93.3	91.9	93.5	92.4	94.3	94.1	94.4	94.5
Power Factor	0.53	0.48	0.77	0.73	0.83	0.81	0.85	0.84
	0.44	0.46	0.70	0.72	0.79	0.80	0.83	0.84

Foundation loads
Max. traction : 1549 lb
Max. compression : 3021 lb

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

Losses (%)	P1 (0,9;1,0)	5.7	5.5	5.5	5.4
	P2 (0,5;1,0)	4.1	4.0	4.0	3.9
	P3 (0,25;1,0)	3.7	3.5	3.5	3.5
	P4 (0,9;0,5)	2.9	2.8	2.8	2.8
	P5 (0,5;0,5)	1.7	1.6	1.6	1.6
	P6 (0,5;0,25)	1.1	1.1	1.1	1.0
	P7 (0,25;0,25)	0.7	0.6	0.6	0.6

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6316 C3	6316 C3
Sealing	:	WSeal	WSeal
Lubrication interval	:	13000 h	13000 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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