

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line : W22 IE3 Three-Phase	Product code : 12862550				
Frame : 250S/M Insulation class : F Duty cycle : S1 Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP55 Design : N	Cooling method : IC411 - TEFC Mounting : B5T Rotation <sup>1</sup> : Both (CW and CCW) Starting method : Direct On Line Approx. weight <sup>2</sup> : 472 kg Moment of inertia (J) : 1.05 kgm <sup>2</sup>				
Output [kW]	55	55	55	55	
Poles	4	4	4	4	
Frequency [Hz]	50	50	50	60	
Rated voltage [V]	380/660	400/690	415	460	
Rated current [A]	103/59.3	98.7/57.2	97.5	87.2	
L. R. Amperes [A]	742/427	760/441	799	741	
LRC [A]	7.2	7.7	8.2	8.5	
No load current [A]	36.0/20.7	39.0/22.6	42.0	37.0	
Rated speed [RPM]	1480	1482	1484	1785	
Slip [%]	1.33	1.20	1.07	0.83	
Rated torque [Nm]	355	355	354	294	
Locked rotor torque [%]	240	270	300	310	
Breakdown torque [%]	270	300	330	340	
Service factor	1.00	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	28s (cold) 16s (hot)	28s (cold) 16s (hot)	27s (cold) 15s (hot)	34s (cold) 19s (hot)	
Noise level <sup>2</sup>	64.0 dB(A)	64.0 dB(A)	64.0 dB(A)	68.0 dB(A)	
Efficiency (%)	25%				
	50%	94.5	94.3	94.0	
	75%	94.6	94.6	94.6	
	100%	94.6	94.6	94.6	
Power Factor	25%				
	50%	0.73	0.69	0.60	
	75%	0.82	0.80	0.78	
	100%	0.86	0.85	0.83	
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	5.5	5.5	5.5	4.6
	P2 (0,5;1,0)	4.6	4.6	4.6	3.9
	P3 (0,25;1,0)	4.6	4.6	4.6	3.9
	P4 (0,9;0,5)	2.5	2.5	2.5	2.1
	P5 (0,5;0,5)	1.7	1.7	1.7	1.5
	P6 (0,5;0,25)	1.1	1.1	1.1	0.9
	P7 (0,25;0,25)	0.7	0.7	0.7	0.6
Bearing type : <u>Drive end</u> 6314 C3 <u>Non drive end</u> 6314 C3 Sealing : Oil Seal Oil Seal Lubrication interval : 14000 h 14000 h Lubricant amount : 27 g 27 g Lubricant type : Mobil Polyrex EM	Foundation loads Max. traction : 7546 N Max. compression : 12177 N				
This revision replaces and cancel the previous one, which must be eliminated. (1) Looking the motor from the shaft end. (2) Measured at 1m and with tolerance of +3dB(A). (3) Approximate weight subject to changes after manufacturing process. (4) At 100% of full load.	These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in IEC 60034-1.				
Rev.	Changes Summary	Performed	Checked	Date	
Performed by					
Checked by			Page	Revision	
Date	30/08/2023		1 / 3		

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Notes

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	30/08/2023		2 / 3	

# 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	155 °C

Rev.	Changes Summary	Performed	Checked	Date
Performed by				Page 3 / 3
Checked by				
Date	30/08/2023			
				Revision