

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer : THE INVERTER DRIVE SUPERMARKET LTD

Product line : W22 - IE3 Premium Efficiency Multitensão

Frame	: L100L	Cooling method	: IC411 - TEFC
Insulation class	: F	Mounting	: B35L(D)
Duty cycle	: S1	Rotation ¹	: Both
Ambient temperature	: -20 °C to +40 °C	Starting method	: Direct On Line
Altitude	: 1000 m.a.s.l	Approx. weight ³	: 42.6 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0120 kgm ²
Design	: N		

Output	3 kW (4 HP)	3 kW (4 HP)	3 kW (4 HP)	3.6 kW (4.9 HP)	3.6 kW (4.9 HP)	3 kW (4 HP)	
Poles	4	4	4	4	4	4	
Frequency	50 Hz	50 Hz	50 Hz	60 Hz	60 Hz	60 Hz	
Rated voltage	380/660 V	400/690 V	415 V	440 V	460 V	460 V	
Rated current	6.26/3.60 A	6.15/3.57 A	6.07 A	6.45 A	6.21 A	5.33 A	
L. R. Amperes	48.8/28.1 A	48.0/27.8 A	50.4 A	50.3 A	51.5 A	51.2 A	
LRC	7.8	7.8	8.3	7.8	8.3	9.6 x Code M	
No load current	3.00/1.73 A	3.30/1.91 A	3.60 A	2.80 A	3.00 A	3.00 A	
Rated speed	1430 rpm	1440 rpm	1445 rpm	1730 rpm	1735 rpm	1740 rpm	
Slip	4.67 %	4.00 %	3.67 %	3.89 %	3.61 %	3.33 %	
Rated torque	20.0 Nm	19.9 Nm	19.8 Nm	19.9 Nm	19.8 Nm	16.5 Nm	
Locked rotor torque	350 %	390 %	430 %	330 %	370 %	460 %	
Pull up torque	298 %	332 %	366 %	280 %	315 %	391 %	
Breakdown torque	280 %	320 %	360 %	280 %	320 %	390 %	
Service factor	1.00	1.00	1.00	1.00	1.00	1.25	
Noise level ²	53.0 dB(A)	53.0 dB(A)	53.0 dB(A)	54.0 dB(A)	54.0 dB(A)	54.0 dB(A)	
Locked rotor time (hot)	15 s	15 s	15 s	12 s	15 s	15 s	
Locked rotor time (cold)	27 s	27 s	27 s	22 s	27 s	27 s	
Efficiency (%)	50%	87.7	87.0	86.3	88.2	87.8	84.0
	75%	88.0	88.0	87.7	88.6	88.7	86.5
	100%	87.7	88.0	88.1	88.2	88.7	89.5
Power Factor	50%	0.65	0.60	0.56	0.68	0.64	0.59
	75%	0.77	0.73	0.70	0.79	0.76	0.71
	100%	0.83	0.80	0.78	0.83	0.82	0.79

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

Losses (%)	Losses at normative operating points (speed;torque), in percentage of rated output power						
	P1(0,9;1,0)	P2(0,5;1,0)	P3(0,25;1,0)	P4(0,9;0,5)	P5(0,5;0,5)	P6(0,5;0,25)	P7(0,25;0,25)
	13.6	13.2	13.1	13.0	12.4	11.4	
	12.3	11.9	11.8	11.7	11.1	10.3	
	11.9	11.6	11.5	11.4	10.9	10.0	
	5.9	5.8	5.7	5.6	5.4	5.0	
	4.4	4.3	4.3	4.2	4.0	3.7	
	2.7	2.7	2.6	2.6	2.5	2.3	
	2.0	2.0	2.0	2.0	1.9	1.7	

Bearing type	Drive end 6206-ZZ	Non drive end 6205-ZZ	Foundation loads	
Lubrication interval	-	-	Max. traction	: 1576 N
Lubricant amount	-	-	Max. compression	: 1994 N
Lubricant type	MOBIL POLYREX EM		Load type	: -
			Load torque	: -
			Load inertia (J=GD ² /4)	: -

Notes
See notes on page 2.

Rev.	Changes Summary		Rev.	Checked	Date
Performed by	jhodson		1555171308		
Checked by	AUTOMATICO		Page	Rev.	
Date	01/07/2024		1 / 2	0	

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Notes

Standards

Specification : IEC 60034-1
Test : IEC 60034-2
Noise : IEC 60034-9

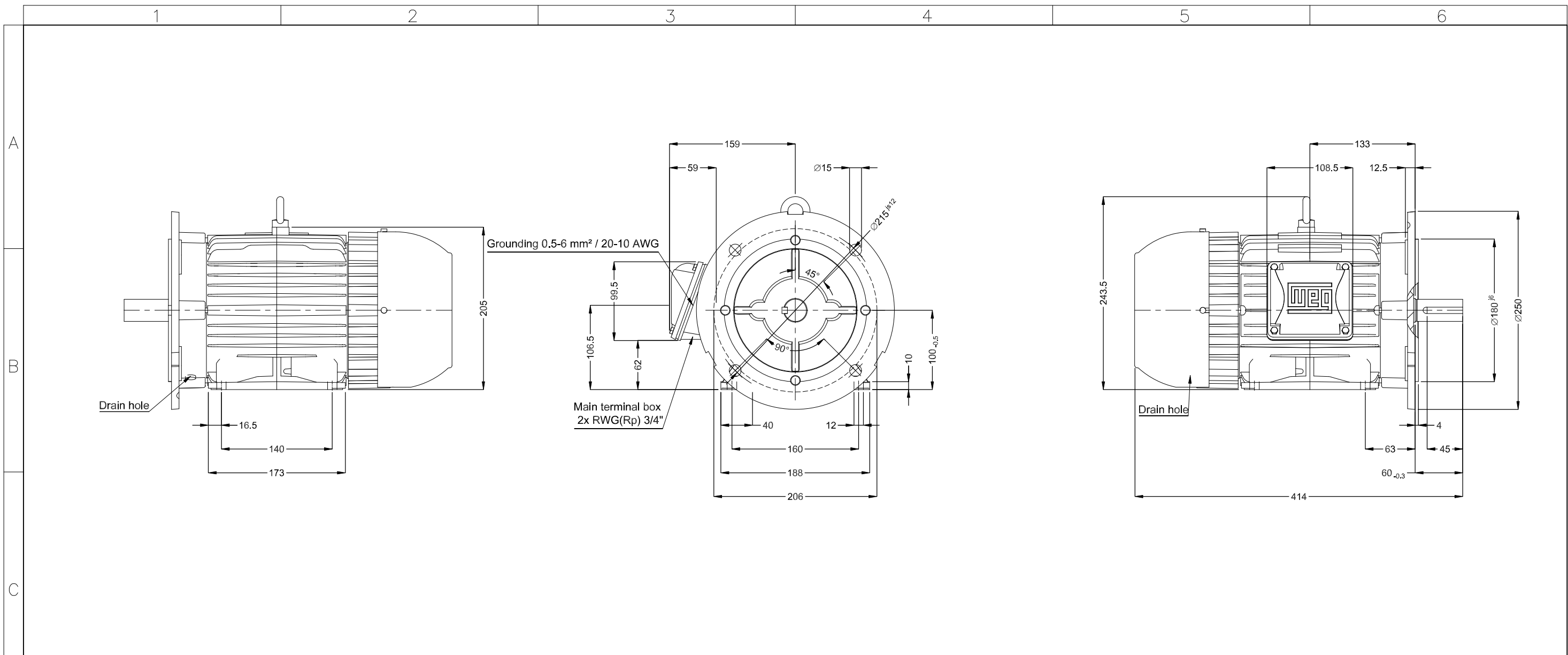
Vibration : IEC 60034-14
Tolerance : IEC 60034-1

This revision replaces and cancel the previous one, which must be eliminated.

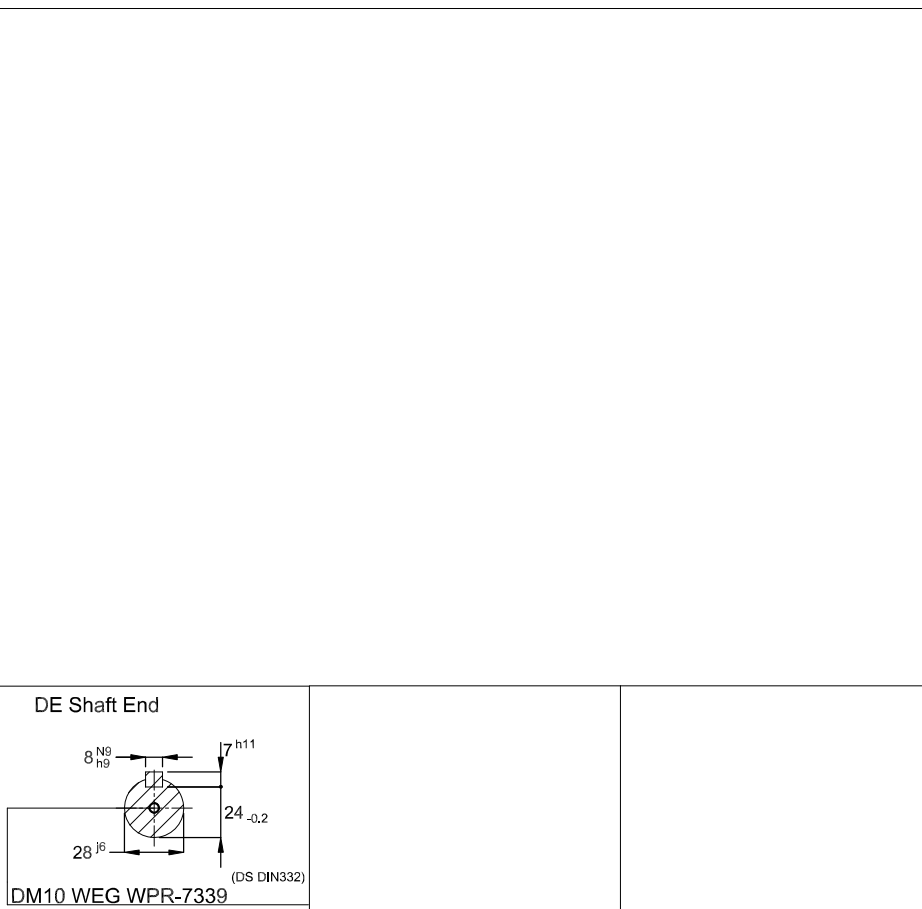
- (1) Looking the motor from the shaft end.
- (2) Measured at 1m and with tolerance of +3dB(A).
- (3) Approximate weight, subject to be changed after manufacturing process.

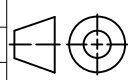

These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in IEC 60034-1.

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Performed by	jhodson	1555171308		
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Color RAL 6002
 Painting plan 207A
 Mounting B35L(D)



3 kW (4 HP) 04 Poles 50 Hz										A	
THE INVERTER DRIVE SUPERMARKET LTD											
								Scale	1 : 5		
								PIRWUSER	00		
ECM	LOC	SUMMARY OF MODIFICATIONS					EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWUSER	 THREE PH. MOTOR W22 IE3 FRAME L100L IP55 TEFC					PREVIEW WDD 00 SHEET /				
CHECKED											
RELEASED											
REL. DATE											