

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer		: ASTRAPROM			
Product line		: W22 IE3 Three-Phase		Product code : 12868147	
Frame	: 90L	Cooling method	: IC411 - TEFC		
Insulation class	: F	Mounting	: B5T		
Duty cycle	: S1	Rotation ¹	: Both (CW and CCW)		
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line		
Altitude	: 1000 m.a.s.l.	Approx. weight ³	: 23.9 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.0066 kgm ²		
Design	: N				
Output [kW]	1.5	1.5	1.5	1.5	1.5
Poles	4	4	4	4	4
Frequency [Hz]	50	50	50	50	60
Rated voltage [V]	220/380	230/400	240/415	460	
Rated current [A]	5.84/3.38	5.81/3.34	5.79/3.35	2.94	
L. R. Amperes [A]	40.3/23.3	43.0/24.7	45.8/26.5	25.0	
LRC [A]	6.9	7.4	7.9	8.5	
No load current [A]	3.28/1.90	3.83/2.20	4.15/2.40	2.00	
Rated speed [RPM]	1445	1450	1455	1755	
Slip [%]	3.67	3.33	3.00	2.50	
Rated torque [Nm]	9.92	9.88	9.85	8.17	
Locked rotor torque [%]	260	290	310	340	
Breakdown torque [%]	300	320	350	409	
Service factor	1.00	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	21s (cold) 12s (hot)	19s (cold) 11s (hot)	18s (cold) 10s (hot)	19s (cold) 11s (hot)	
Noise level ²	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)	51.0 dB(A)	
Efficiency (%)	25%				
	50%	84.0	82.0	81.0	82.5
	75%	85.3	84.0	84.0	85.5
	100%	85.3	85.3	85.3	86.5
Power Factor	25%				
	50%	0.59	0.55	0.50	0.53
	75%	0.72	0.68	0.63	0.65
	100%	0.79	0.76	0.73	0.74
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	16.9	16.9	16.9	15.3
	P2 (0,5;1,0)	15.6	15.6	15.6	14.1
	P3 (0,25;1,0)	15.2	15.2	15.2	13.7
	P4 (0,9;0,5)	8.6	8.6	8.6	7.8
	P5 (0,5;0,5)	6.6	6.6	6.6	5.9
	P6 (0,5;0,25)	4.9	4.9	4.9	4.4
	P7 (0,25;0,25)	3.7	3.7	3.7	3.4
Bearing type	: Drive end : 6205 ZZ	Non drive end : 6204 ZZ	Foundation loads		
Sealing	: Oil Seal	Lip Seal	Max. traction	: 839 N	
Lubrication interval	: -	-	Max. compression	: 1073 N	
Lubricant amount	: -	-			
Lubricant type	: 00088				
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
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Notes

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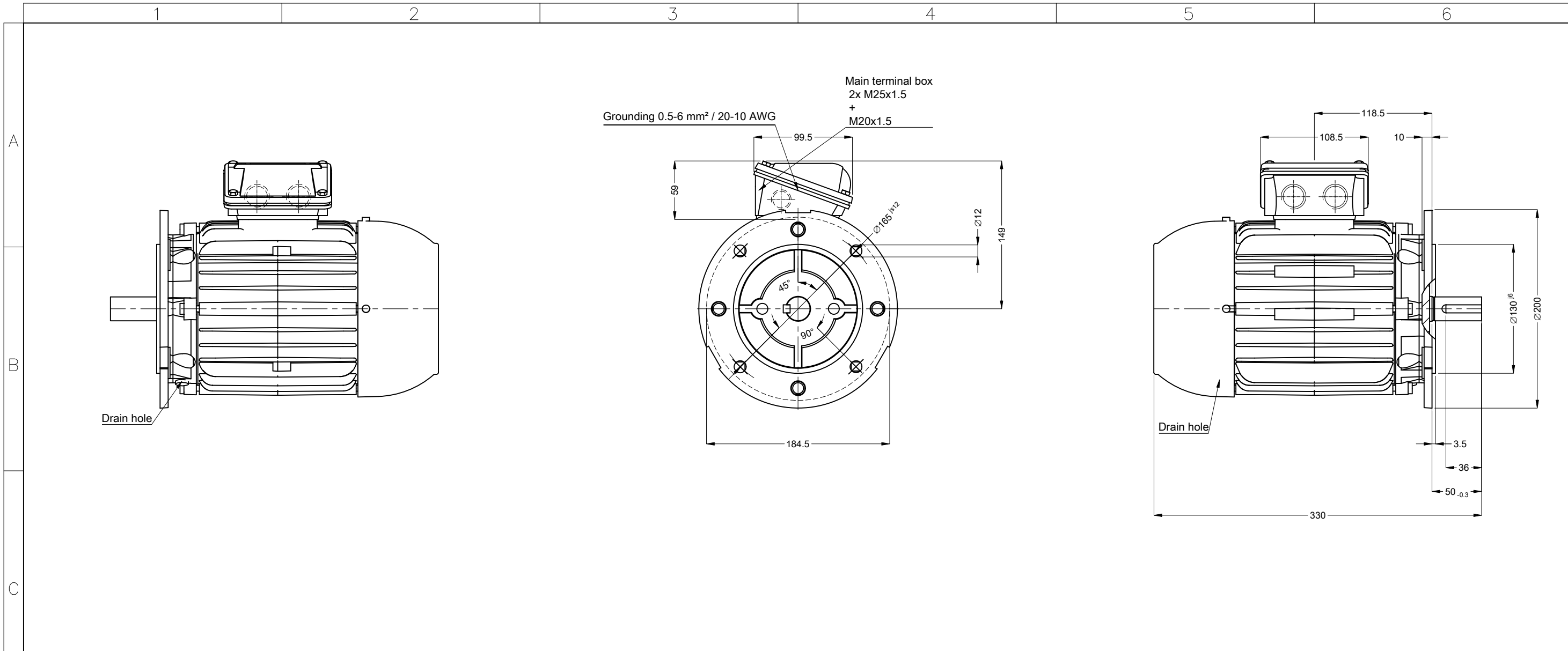
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Thermal protection

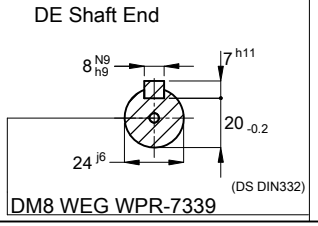
ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermistor - 2 wires	1 x Phase	155 °C

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				Revision



				1.5 kW 04 Poles 50 Hz		A
				Scale 1 : 4		
				HYBRISUSER		00
		ECM	LOC	SUMMARY OF MODIFICATIONS		EXECUTED
		EXECUTED	HYBRISUSER	THREE PH. MOTOR W22 IE3		CHECKED
		CHECKED		FRAME 90L IP55 TEFC		RELEASED
		RELEASED				DATE
		REL. DATE				VER

- Sealing - oil seal ring
- Bearing cap
- Thermal protection to switch off - thermistors 155°C
- Color RAL 5009
- Painting plan 207A
- Mounting B5T



EXECUTED	HYBRISUSER		THREE PH. MOTOR W22 IE3	PREVIEW WDD 00 SHEET 1 / 1	
CHECKED			FRAME 90L IP55 TEFC		
RELEASED					
REL. DATE					