

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer : QUANTUM CONTROLS

Product line : W22 - IE3 Premium Efficiency Multivoltage

Frame	: 315L	Cooling method	: IC411 - TEFC
Insulation class	: F	Mounting	: B5T
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	: 1413 kg
Protection degree	: IP55	Moment of inertia (J)	: 3.57 kgm ²
Design	: N		

Output	250 kW	250 kW	250 kW	250 kW
Poles	2	2	2	2
Frequency	50 Hz	50 Hz	50 Hz	60 Hz
Rated voltage	380/660 V	400/690 V	415 V	460 V
Rated current	440/253 A	418/242 A	403 A	364 A
L. R. Amperes	3077/1772 A	3132/1816 A	3220 A	3093 A
LRC	7.0	7.5	8.0	8.5 x Code J
No load current	95.0/54.7 A	101/58.6 A	106 A	96.0 A
Rated speed	2978 rpm	2980 rpm	2982 rpm	3584 rpm
Slip	0.73 %	0.67 %	0.60 %	0.44 %
Rated torque	802 Nm	801 Nm	801 Nm	666 Nm
Locked rotor torque	210 %	220 %	240 %	260 %
Pull up torque	175 %	185 %	200 %	220 %
Breakdown torque	230 %	250 %	270 %	280 %
Service factor	1.00	1.00	1.00	1.25
Noise level ²	78.0 dB(A)	78.0 dB(A)	78.0 dB(A)	82.0 dB(A)
Locked rotor time (hot)	21 s	21 s	21 s	21 s
Locked rotor time (cold)	38 s	38 s	38 s	38 s
Efficiency (%)	50%	95.5	95.5	95.5
	75%	96.0	96.0	96.0
	100%	96.0	96.0	96.0
Power Factor	50%	0.85	0.83	0.83
	75%	0.89	0.89	0.88
	100%	0.90	0.90	0.90

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

Losses (%)	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)
	4.4	3.5	3.0	2.3	1.4	1.0	0.5
	4.4	3.5	3.0	2.3	1.4	1.0	0.5
	4.4	3.5	3.0	2.3	1.4	1.0	0.5
	4.6	3.6	3.2	2.4	1.5	1.0	0.6

Bearing type	Drive end 6314-C3	Non drive end 6314-C3	Foundation loads Max. traction	: 10101 N
Lubrication interval	5000 h	5000 h	Max. compression	: 23959 N
Lubricant amount	27 g	27 g	Load type	: -
Lubricant type	MOBIL POLYREX EM		Load torque	: -
			Load inertia (J=GD ² /4)	: -

Notes
See notes on page 2.

Rev.	Changes Summary	Rev.	Checked	Date
Performed by	ghodgetts			1751725681
Checked by	AUTOMATICO	Page	Rev.	
Date	12/09/2025	1 / 2	0	

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Thermal protection

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

Space heater information
Voltage: 110-127/200-240 V
Output:

Notes

Standards

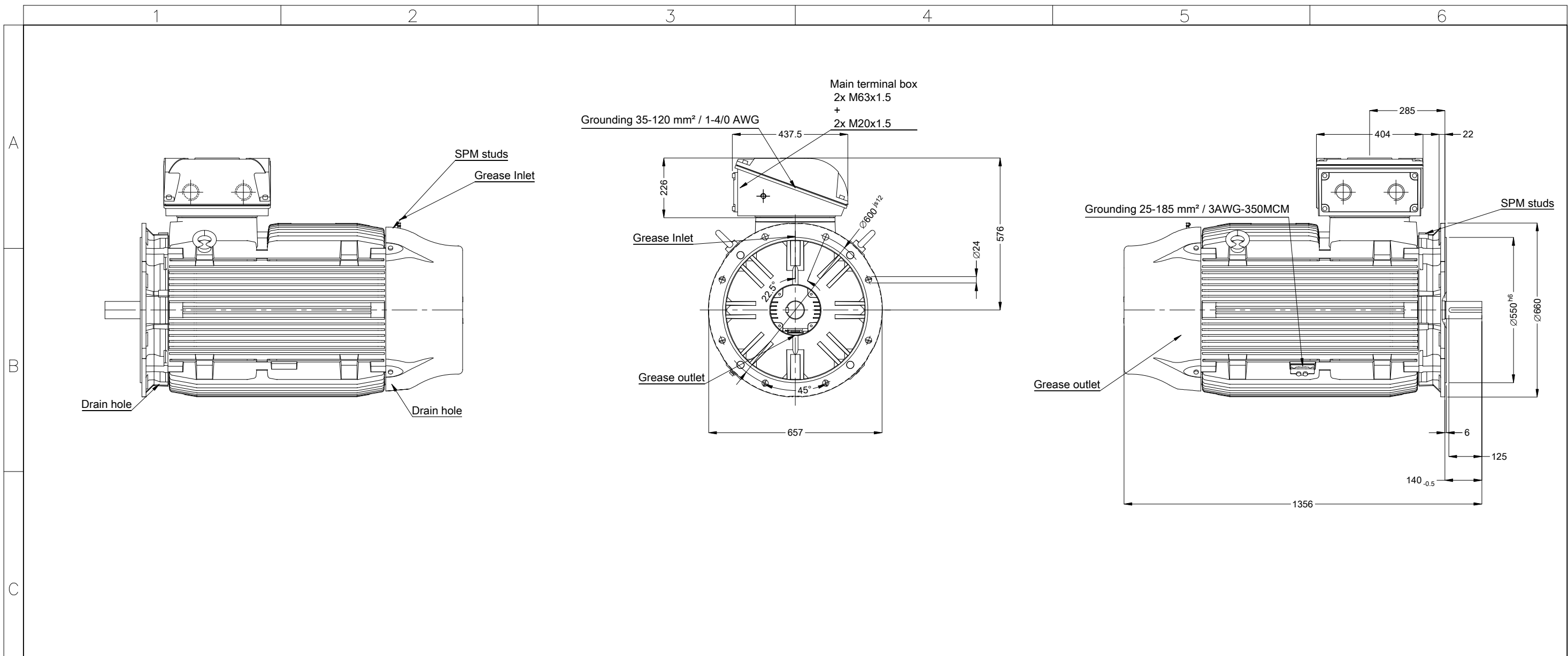
Specification	: IEC 60034-1	Vibration	: IEC 60034-14
Test	: IEC 60034-2	Tolerance	: IEC 60034-1
Noise	: IEC 60034-9		

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.

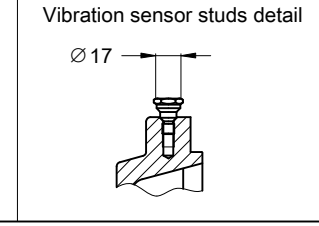
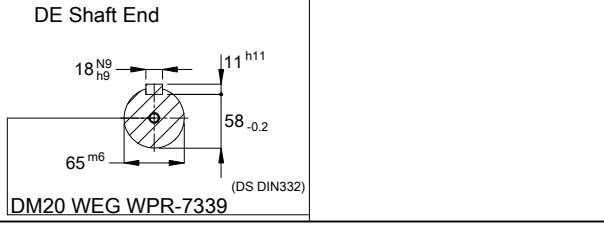
These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in IEC 60034-1.

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D			250 kW 02 Poles 50 Hz		A	
	QUANTUM CONTROLS					
E					Scale 1 : 15	
					PIRWUSER 00	
				ECM LOC SUMMARY OF MODIFICATIONS EXECUTED CHECKED RELEASED DATE VER		
				EXECUTED PIRWBUSER		
				CHECKED		
				RELEASED		
				REL. DATE WEG REDDITCH [Operational] SHEET 1 / 1		

Space heaters 110-127 V / 200-240 V
SPM studs
NDE endshield with electrically insulated bearing hub
Color RAL 5009
Painting plan 222P
Mounting B5T



THREE PH. MOTOR W22 IE3		PREVIEW		
FRAME 315L IP55 TEFC				
REL. DATE		SHEET 1 / 1		