

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	: 1458 kg
Protection degree	: IP55	Moment of inertia (J)	: 5.75 kgm ²
Design	: N		

Output	250 kW	250 kW	250 kW	250 kW
Poles	4	4	4	4
Frequency	50 Hz	50 Hz	50 Hz	60 Hz
Rated voltage	380/660 V	400/690 V	415 V	460 V
Rated current	454/261 A	436/253 A	424 A	384 A
L. R. Amperes	3042/1751 A	3183/1845 A	3350 A	3149 A
LRC	6.7	7.3	7.9	8.2 x Code J
No load current	128/73.7 A	138/80.0 A	148 A	130 A
Rated speed	1487 rpm	1488 rpm	1490 rpm	1790 rpm
Slip	0.87 %	0.80 %	0.67 %	0.56 %
Rated torque	1606 Nm	1605 Nm	1603 Nm	1334 Nm
Locked rotor torque	260 %	290 %	310 %	320 %
Pull up torque	220 %	245 %	260 %	270 %
Breakdown torque	240 %	270 %	290 %	290 %
Service factor	1.00	1.00	1.00	1.25
Noise level ²	75.0 dB(A)	75.0 dB(A)	75.0 dB(A)	78.0 dB(A)
Locked rotor time (hot)	19 s	19 s	19 s	19 s
Locked rotor time (cold)	34 s	34 s	34 s	34 s
Efficiency (%)	50%	95.8	96.0	96.0
	75%	96.0	96.2	96.2
	100%	96.2	96.2	96.4
Power Factor	50%	0.77	0.73	0.71
	75%	0.84	0.82	0.80
	100%	0.87	0.86	0.85

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)
	4.3	3.5	3.0	2.3	1.6	1.2	0.7
	4.3	3.5	3.0	2.3	1.6	1.2	0.7
	4.1	3.3	2.8	2.2	1.5	1.1	0.6
	4.3	3.5	3.0	2.3	1.6	1.2	0.7
	4.3	3.5	3.0	2.3	1.6	1.2	0.7
	4.3	3.5	3.0	2.3	1.6	1.2	0.7
	4.3	3.5	3.0	2.3	1.6	1.2	0.7

	Drive end	Non drive end	Foundation loads
Bearing type	6319-C3	6316-C3	Max. traction : 29455 N
Lubrication interval	11000 h	13000 h	Max. compression : 43760 N
Lubricant amount	45 g	34 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	1751762669		
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

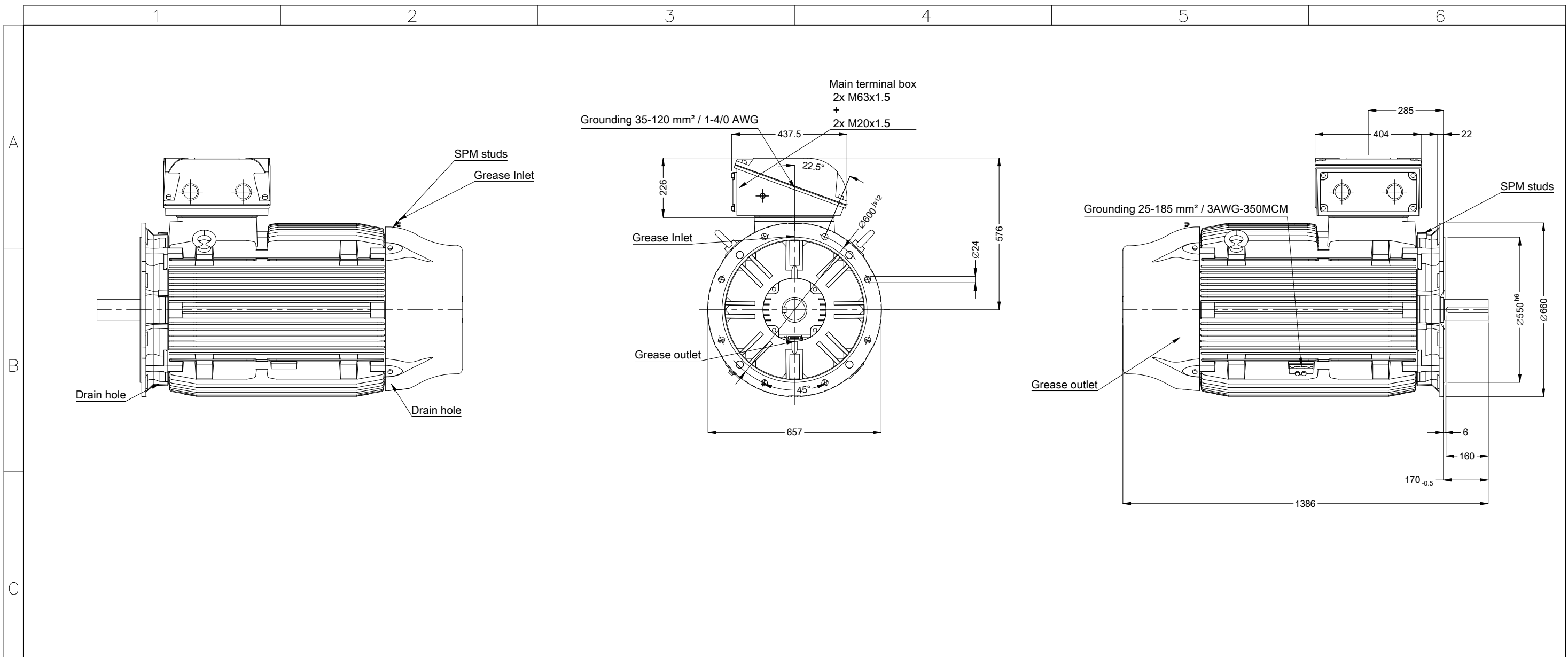
Specification	: IEC 60034-1	Vibration	: IEC 60034-14
Test	: IEC 60034-2	Tolerance	: IEC 60034-1
Noise	: IEC 60034-9		

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.

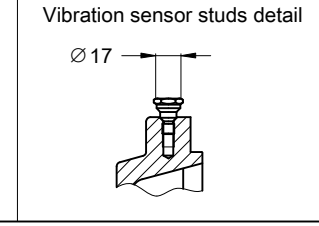
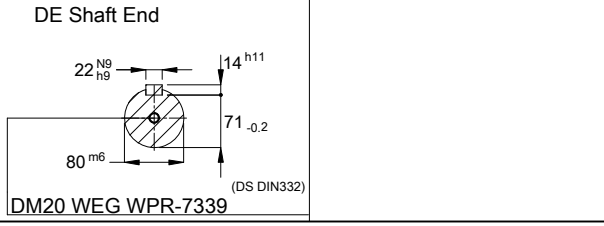
These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in IEC 60034-1.

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D			250 kW 04 Poles 50 Hz		A
	QUANTUM CONTROLS				
E					Scale 1 : 15
					PIRWUSER 00
				ECM	LOC
				EXECUTED	PIRWUSER
				CHECKED	
				RELEASED	
				REL. DATE	
				WEG	REDDITCH
				[Operational]	

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



SUMMARY OF MODIFICATIONS		PIRWUSER	00
EXECUTED	PIRWUSER	EXECUTED	CHECKED
CHECKED		RELEASED	DATE
RELEASED		VER	
REL. DATE	WEG	REDDITCH	
		PREVIEW	
		WDD	00
		SHEET	1 / 1

Dimensions in mm

A3