

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	: B3T
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	: 1469 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	95.5
	75%	96.0	96.2	96.2
	100%	96.2	96.2	96.2
Power Factor	50%	0.77	0.73	0.72
	75%	0.84	0.82	0.81
	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)	4.3	4.3	4.1	4.3
	P2(0,5;1,0)	3.5	3.5	3.3	3.5
	P3(0,25;1,0)	3.0	3.0	2.8	3.0
	P4(0,9;0,5)	2.3	2.3	2.2	2.3
	P5(0,5;0,5)	1.6	1.6	1.5	1.6
	P6(0,5;0,25)	1.2	1.2	1.1	1.2
	P7(0,25;0,25)	0.7	0.7	0.6	0.7

Bearing type	Drive end 6319-C3	Non drive end 6316-C3	Foundation loads	
Lubrication interval	11000 h	13000 h	Max. traction	: 29401 N
Lubricant amount	45 g	34 g	Max. compression	: 43814 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	ghodgetts				
Checked by	AUTOMATICO				
Date	12/09/2025				

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer : QUANTUM CONTROLS

Product line : W22 - IE3 Premium Efficiency Multivoltage

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.

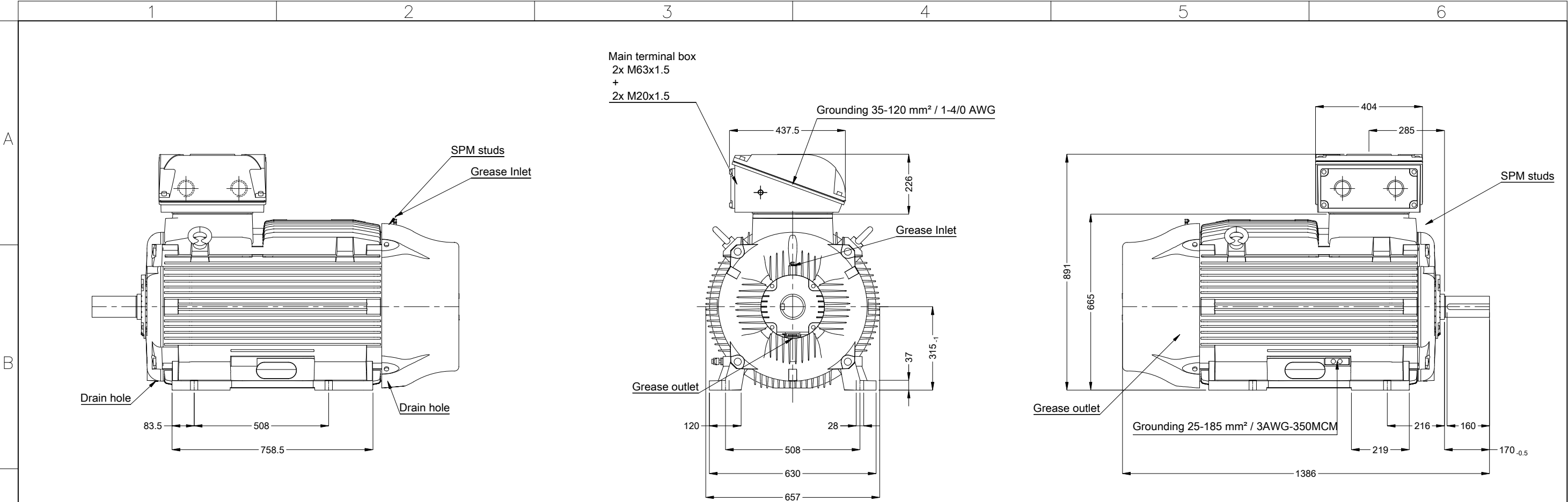
(1) Looking the motor from the shaft end.

(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.

Rev.	Changes Summary		Rev.	Checked	Date
Performed by	ghodgetts		1751751600		
Checked by	AUTOMATICO		Page	Rev.	
Date	12/09/2025		2 / 2	0	



D																									
E	Space heaters 110-127 V / 200-240 V		DE Shaft End				Vibration sensor studs detail																		
	SPM studs																								
	NDE endshield with electrically insulated bearing hub																								
	Color RAL 5009																								
	Painting plan 222P																								
	Mounting B3T																								
														250 kW 04 Poles 50 Hz										A	
														QUANTUM CONTROLS											
																								Scale 1 : 15	
																								PIRWBUSER	
														ECM LOC SUMMARY OF MODIFICATIONS										EXECUTED CHECKED RELEASED DATE VER	
														EXECUTED PIRWBUSER										THREE PH. MOTOR W22 IE3	
														CHECKED										FRAME 315L IP55 TEFC	
														RELEASED										PREVIEW	
														REL. DATE										WDD 00	
														WEG REDDITCH [Operational]										SHEET 1 / 1	