

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer : MGE
Customer reference : MGE

Product line : W20 Three-Phase Product code : 15991756

Frame	: 180M	Locked rotor time	: 16s (cold) 9s (hot)
Output	: 22 kW (30 HP)	Temperature rise	: 80 K
Poles	: 2	Duty cycle	: S1
Frequency	: 50 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 400/690 V	Altitude	: 1000 m.a.s.l.
Rated current	: 40.3/23.4 A	Protection degree	: IP55
L. R. Amperes	: 330/191 A	Cooling method	: IC411 - TEFC
LRC	: 8.2	Mounting	: B5T
No load current	: 14.3/8.26 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 2960 rpm	Noise level ²	: 70.0 dB(A)
Slip	: 1.33 %	Starting method	: Direct On Line
Rated torque	: 71.0 Nm	Approx. weight ³	: 162 kg
Locked rotor torque	: 250 %		
Breakdown torque	: 320 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 0.1138 kgm ²		
Design	: N		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	91.8	92.7	92.7	Max. traction	: 2461 N
Power Factor	0.69	0.80	0.85	Max. compression	: 4054 N

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)
7.6	6.3	5.7	3.9	2.6	1.8	1.2

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6211 ZZ C3	6211 ZZ C3
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	-	-
Lubricant amount	:	-	-
Lubricant type	:	Mobil Polyrex EM	

Notes
PTC

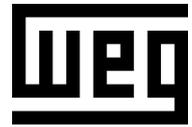
This revision replaces and cancel the previous one, which must be eliminated.

- (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
Performed by				
Checked by			Page	Revision
Date	25/10/2023		1 / 2	

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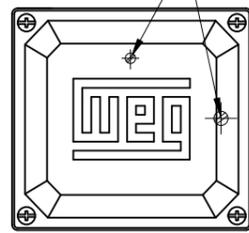
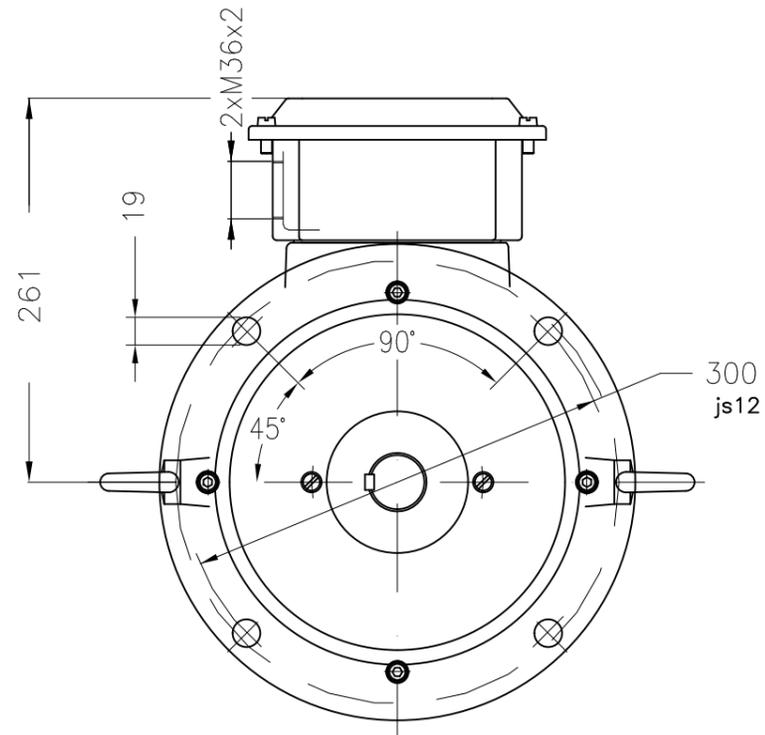
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Thermal protection

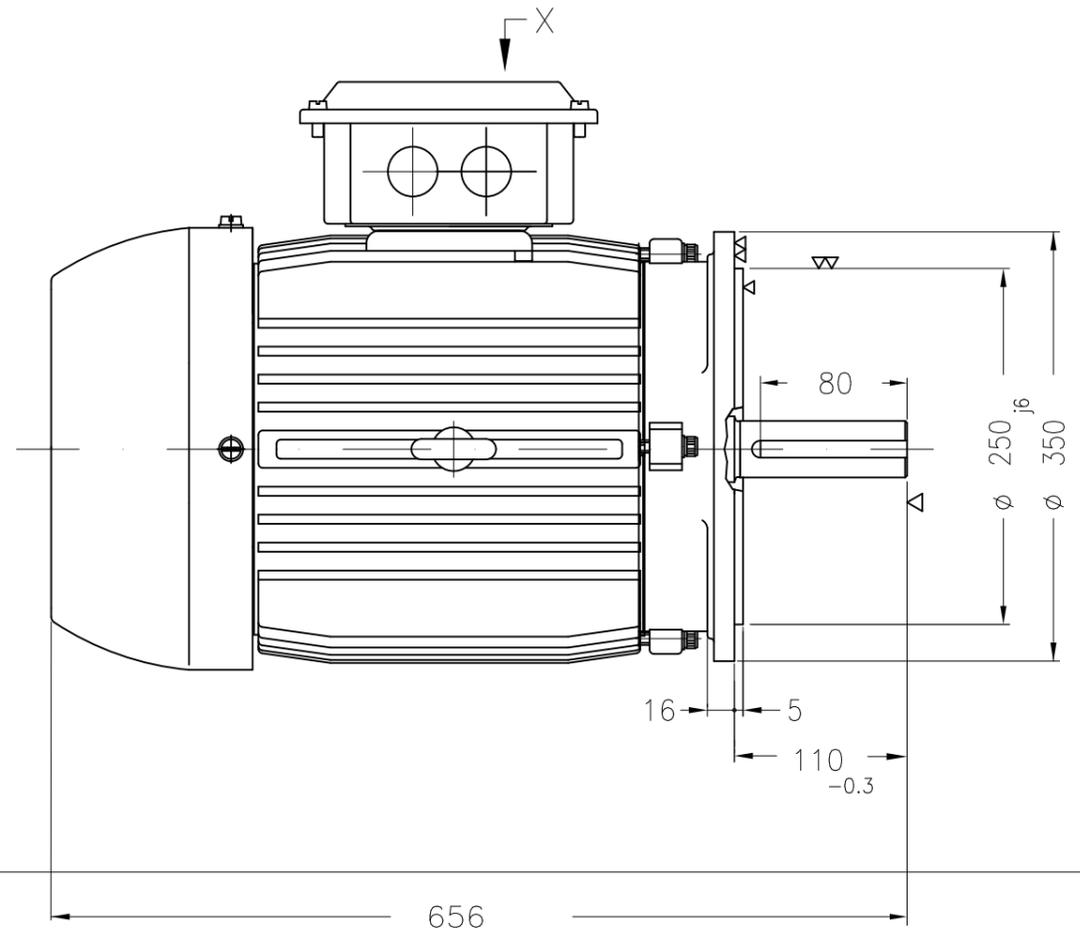
ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermistor - 2 wires	1 x Phase	155 °C

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	25/10/2023		2 / 2	

Grounding for leads 5.2–25 mm² / 10–4 AWG

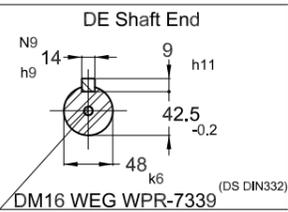


View X



22 kW 02 Poles 50 Hz A

Thermal protection to switch off - thermistors 155°C
 Color RAL 5009
 Painting plan 201A
 Mounting B5T



ECM		LOC	SUMMARY OF MODIFICATIONS		HYBRISUSER					00
EXECUTED	HYBRISUSER		THREE PH. MOTOR W20 GB3		EXECUTED	CHECKED	RELEASED	DATE	VER	
CHECKED			FRAME 180M IP55 TEFC							
RELEASED										
REL. DATE		WMO	Jaragua do Sul	Product Engineering						

PREVIEW

WDD 00

SHEET 1 / 1

