

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 IE3 Three-Phase Product code : 12945361

Frame	: 100L	Locked rotor time	: 55s (cold) 31s (hot)
Output	: 1.5 kW (2 HP)	Temperature rise	: 80 K
Poles	: 6	Duty cycle	: S1
Frequency	: 50 Hz	Ambient temperature	: -20°C to +40°C
Rated voltage	: 230/400 V	Altitude	: 1000 m.a.s.l.
Rated current	: 6.43/3.70 A	Protection degree	: IP55
L. R. Amperes	: 35.4/20.4 A	Cooling method	: IC411 - TEFC
LRC	: 5.5	Mounting	: B3T
No load current	: 3.83/2.20 A	Rotation <sup>1</sup>	: Both (CW and CCW)
Rated speed	: 955 rpm	Noise level <sup>2</sup>	: 44.0 dB(A)
Slip	: 4.50 %	Starting method	: Direct On Line
Rated torque	: 15.0 Nm	Approx. weight <sup>3</sup>	: 34.5 kg
Locked rotor torque	: 270 %		
Breakdown torque	: 270 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 0.0143 kgm <sup>2</sup>		
Design	: N		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	81.5	82.5	82.5	Max. traction	: 950 N
Power Factor	0.49	0.62	0.71	Max. compression	: 1288 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)
21.2	20.0	18.9	10.1	8.1	5.7	4.6

	Drive end	Non drive end
Bearing type	: 6206 ZZ	: 6205 ZZ
Sealing	: V'Ring	: V'Ring
Lubrication interval	: -	: -
Lubricant amount	: -	: -
Lubricant type	: Mobil Polyrex EM	

Notes

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.

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# TORQUE AND CURRENT VS SPEED CURVE

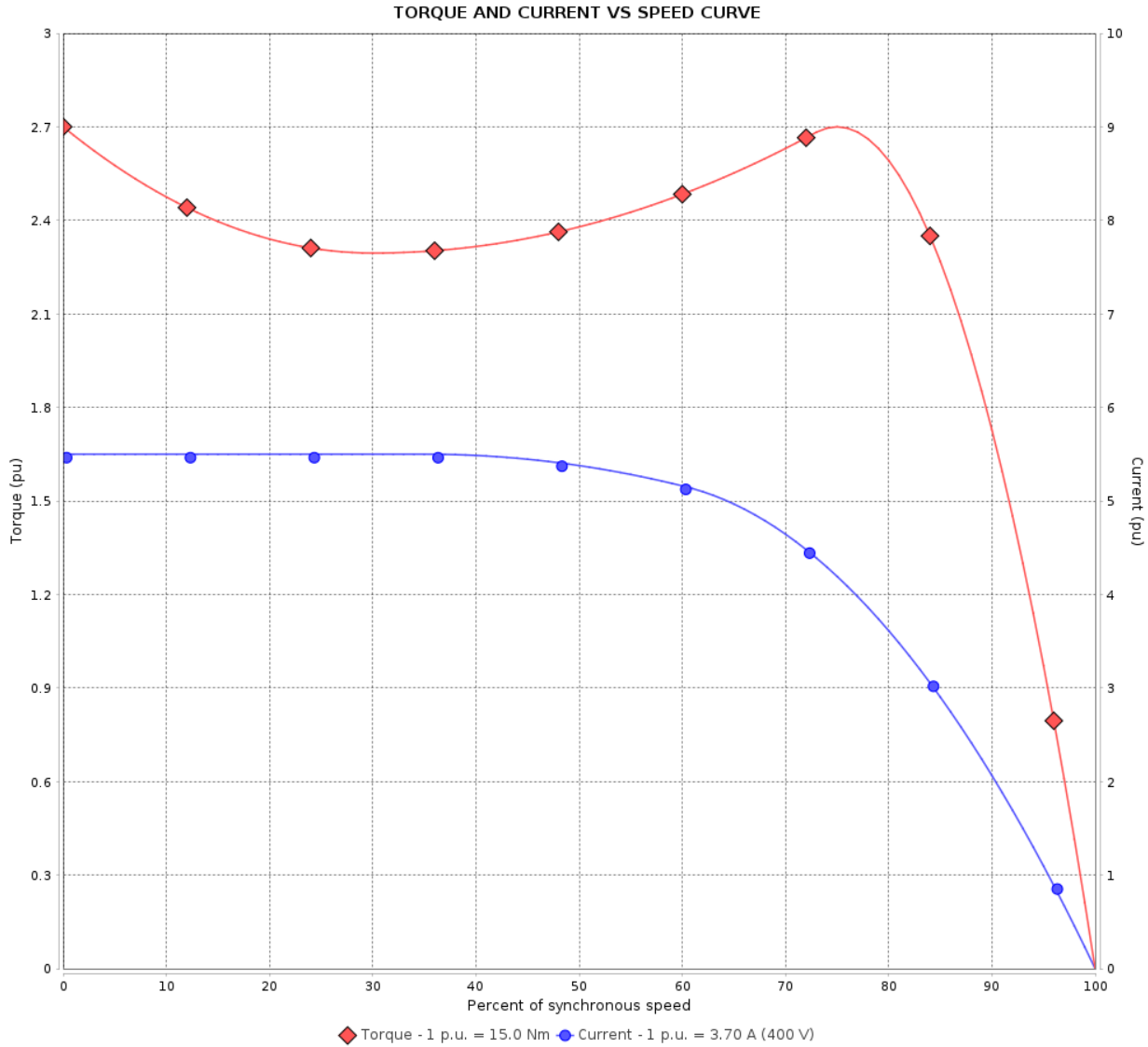
Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_

Product line : W22 IE3 Three-Phase

Product code : 12945361



Performance : 230/400 V 50 Hz 6P

Rated current	: 6.43/3.70 A	Moment of inertia (J)	: 0.0143 kgm <sup>2</sup>
LRC	: 5.5	Duty cycle	: S1
Rated torque	: 15.0 Nm	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.00
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 955 rpm	Design	: N

Locked rotor time : 55s (cold) 31s (hot)

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# LOAD PERFORMANCE CURVE

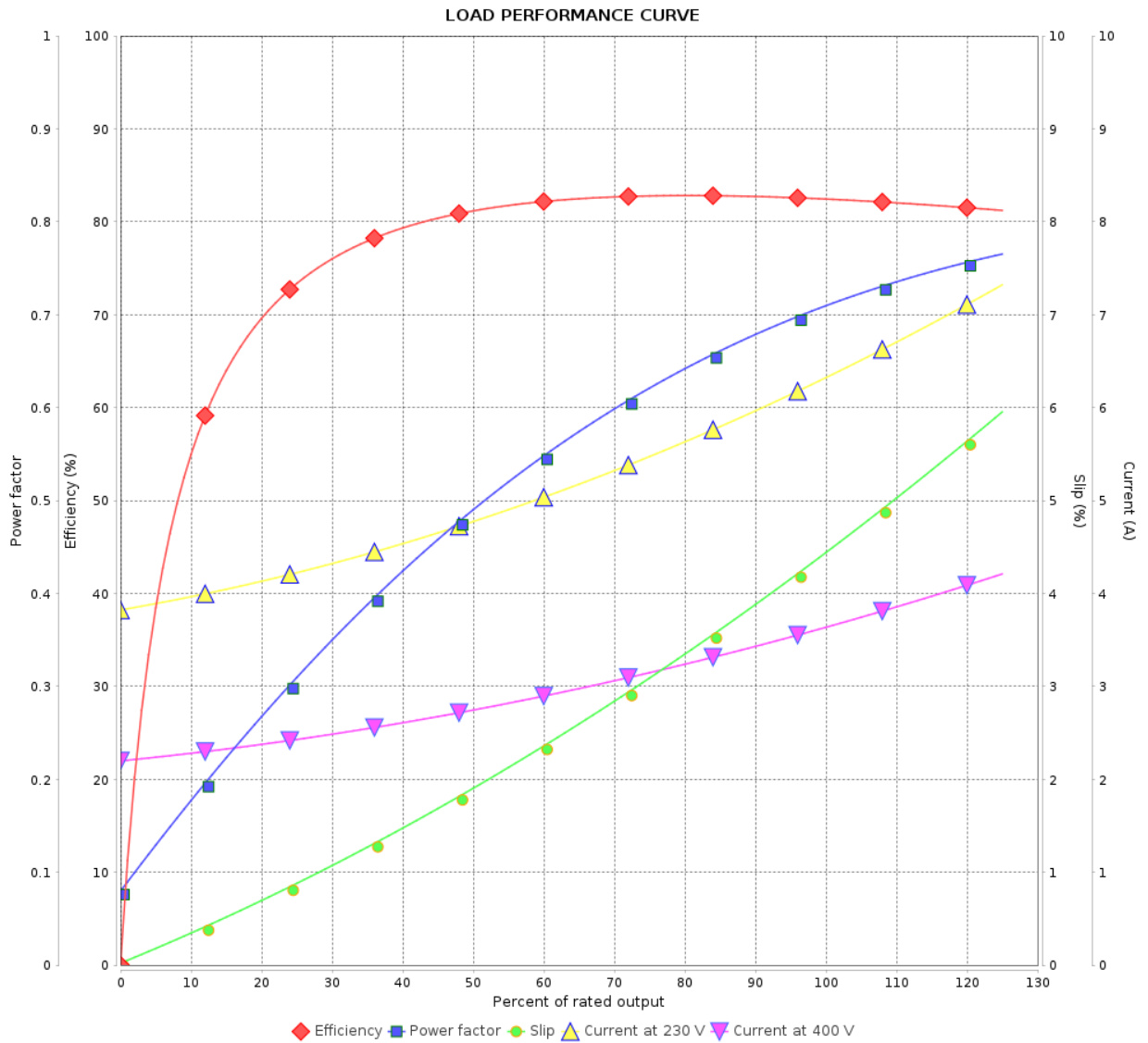
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IE3 Three-Phase

Product code : 12945361



Performance : 230/400 V 50 Hz 6P

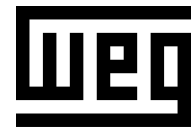
Rated current : 6.43/3.70 A  
 LRC : 5.5  
 Rated torque : 15.0 Nm  
 Locked rotor torque : 270 %  
 Breakdown torque : 270 %  
 Rated speed : 955 rpm

Moment of inertia (J) : 0.0143 kgm<sup>2</sup>  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : N

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# VFD OPERATION CURVE

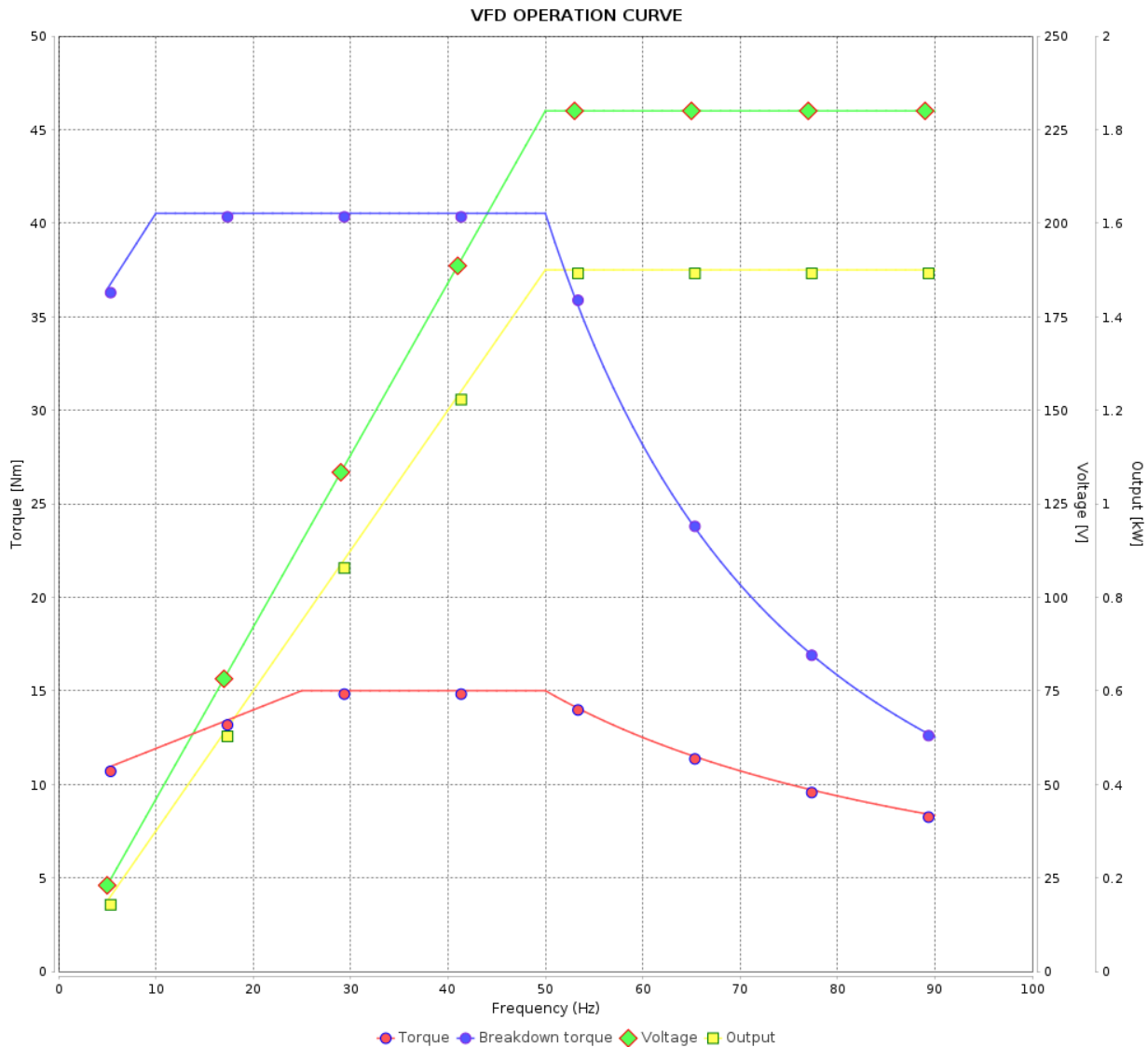
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IE3 Three-Phase

Product code : 12945361

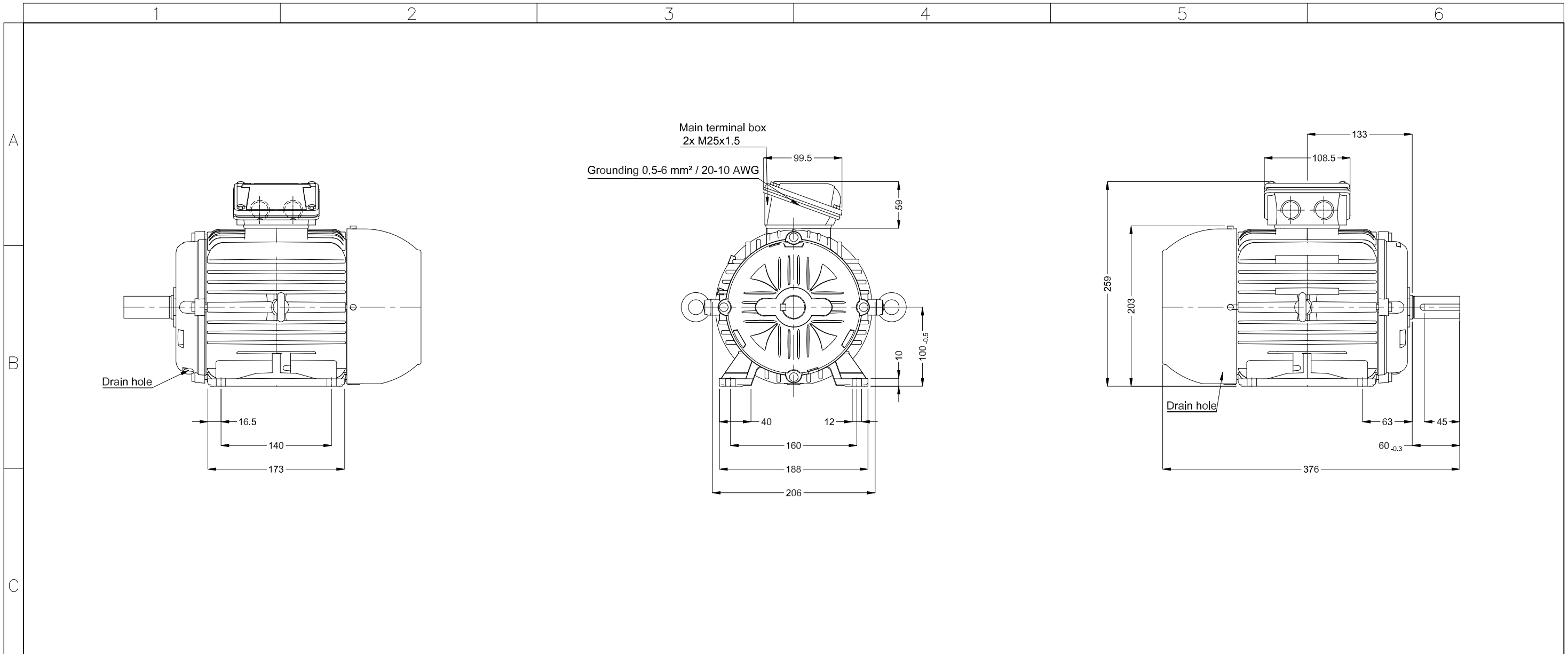


Performance : 230/400 V 50 Hz 6P

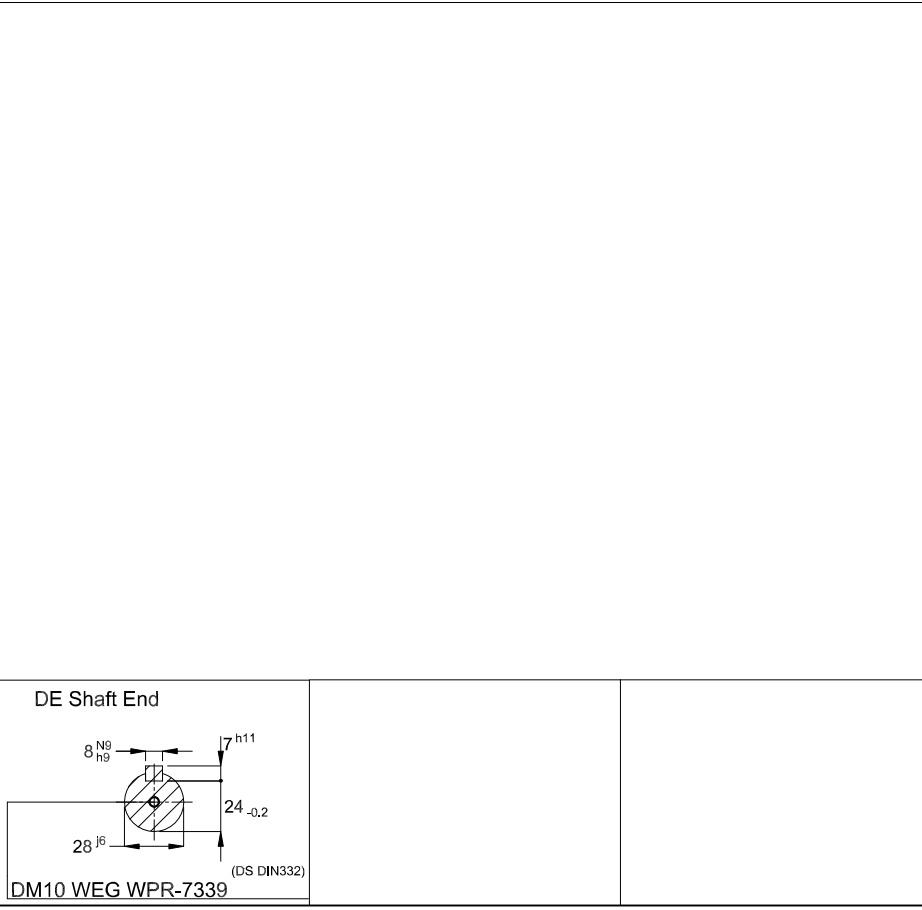
Rated current : 6.43/3.70 A  
 LRC : 5.5  
 Rated torque : 15.0 Nm  
 Locked rotor torque : 270 %  
 Breakdown torque : 270 %  
 Rated speed : 955 rpm

Moment of inertia (J) : 0.0143 kgm<sup>2</sup>  
 Duty cycle : S1  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : N

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Color RAL 5009  
 Painting plan 207A  
 Mounting B3T



1.5 kW 06 Poles 50 Hz										A	
Scale 1 : 5											
HYBRISUSER										00	
ECM	LOC	SUMMARY OF MODIFICATIONS					EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	THREE PH. MOTOR W22 IE3 FRAME 100L IP55 TEFC					PREVIEW		WDD 00		
CHECKED							SHEET		1 / 1		
RELEASED											
REL. DATE											