

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :
Customer reference : SISEL TECH - ROMANIA

Product line : W22 IE2 Three-Phase Product code : 11361476

Frame	: 160M	Locked rotor time	: 21s (cold) 12s (hot)
Output	: 11 kW (15 HP)	Temperature rise	: 80 K
Poles	: 4	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	: 21.2/12.3 A	Protection degree	: IP55
L. R. Amperes	: 136/78.7 A	Cooling method	: IC411 - TEFC
LRC	: 6.4	Mounting	: B3T
No load current	: 10.0/5.80 A	Rotation ¹	: Both (CW and CCW)
Rated speed	: 1475 rpm	Noise level ²	: 61.0 dB(A)
Slip	: 1.67 %	Starting method	: Direct On Line
Rated torque	: 71.3 Nm	Approx. weight ³	: 128 kg
Locked rotor torque	: 229 %		
Breakdown torque	: 280 %		
Insulation class	: F		
Service factor	: 1.00		
Moment of inertia (J)	: 0.1048 kgm ²		
Design	: N		

Output	50%	75%	100%	Foundation loads	
Efficiency (%)	89.0	90.2	90.2	Max. traction	: 2345 N
Power Factor	0.65	0.76	0.83	Max. compression	: 3605 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)
10.8	9.6	8.7	5.0	3.6	2.4	1.7

	Drive end	Non drive end
Bearing type	: 6309 ZZ C3	: 6209 ZZ C3
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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Thermal protection

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

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TORQUE AND CURRENT VS SPEED CURVE

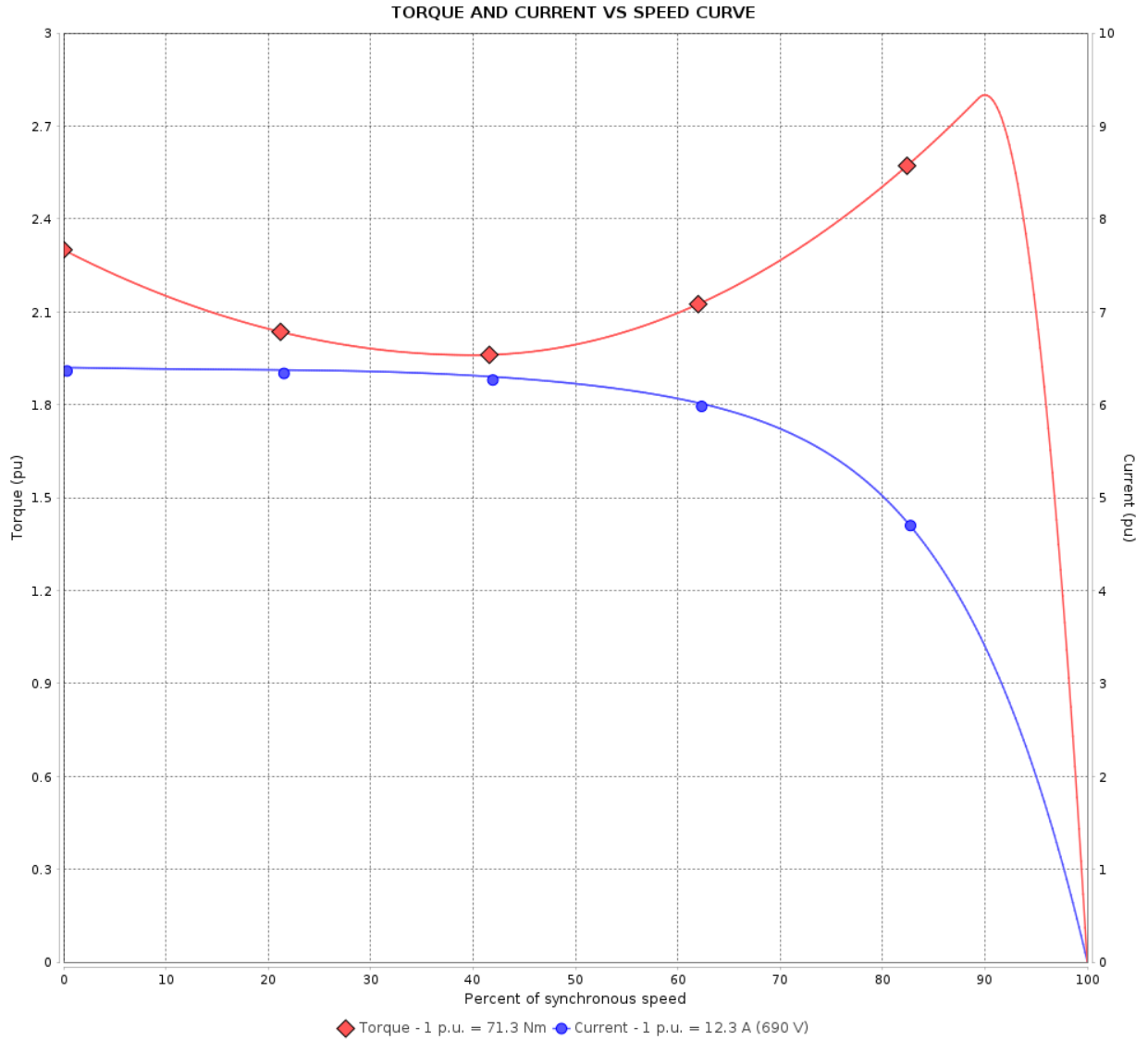


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Breakdown torque : 280 %
Rated speed : 1475 rpm

Moment of inertia (J) : 0.1048 kgm²
Duty cycle : S1
Insulation class : F
Service factor : 1.00
Temperature rise : 80 K
Design : N

Locked rotor time : 21s (cold) 12s (hot)

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LOAD PERFORMANCE CURVE

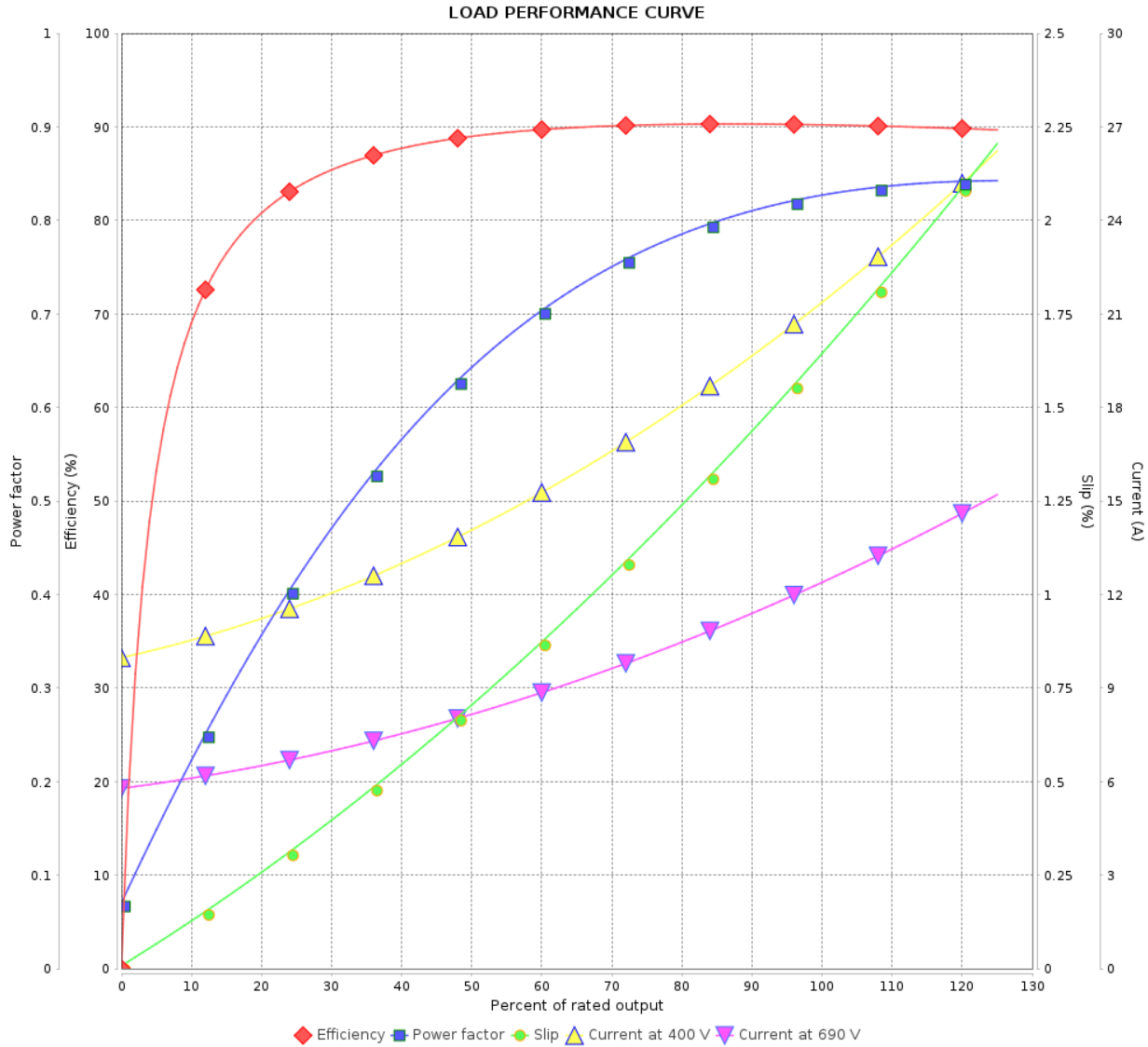
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THERMAL LIMIT CURVE

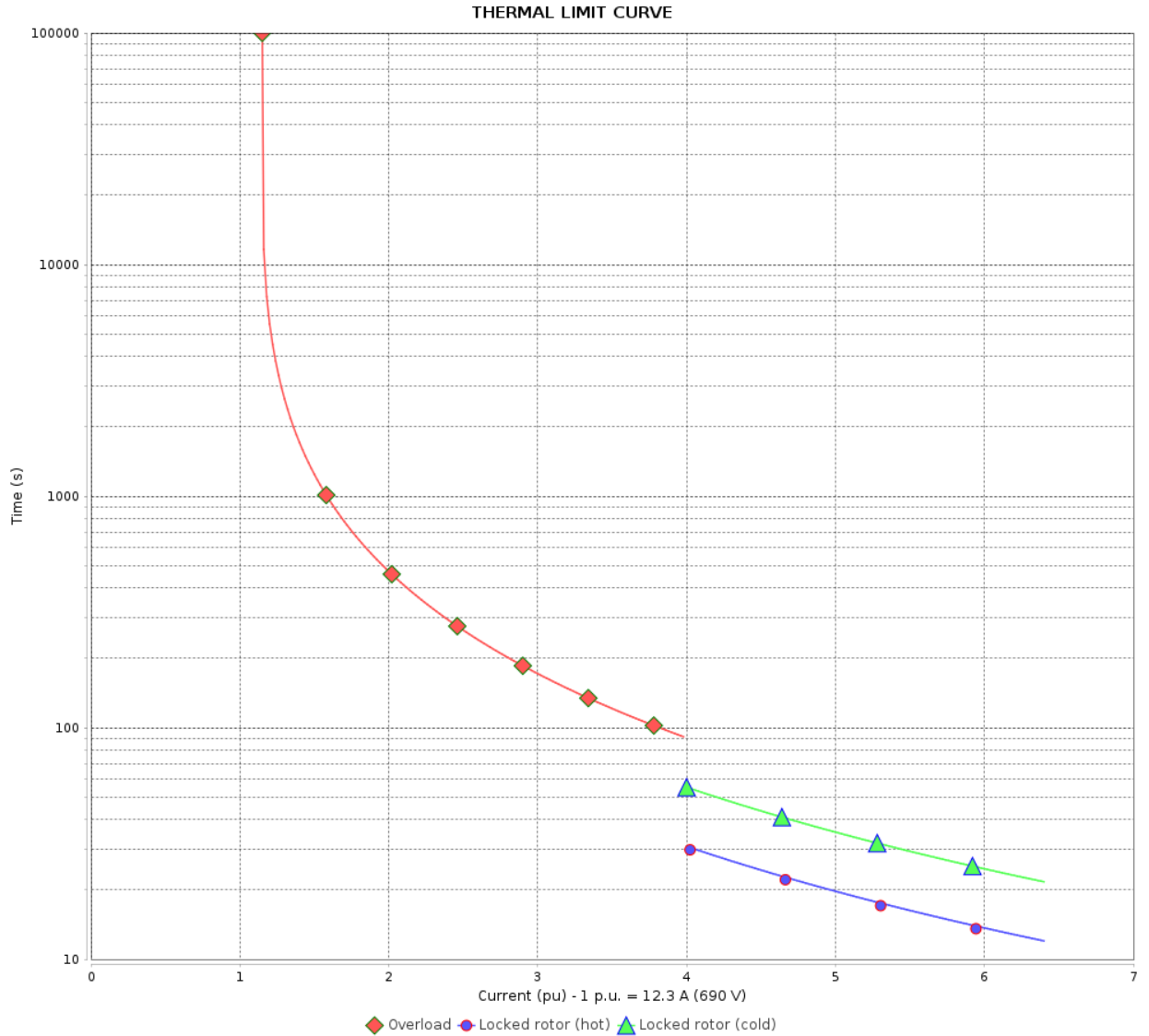


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Heating constant

Cooling constant

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VFD OPERATION CURVE

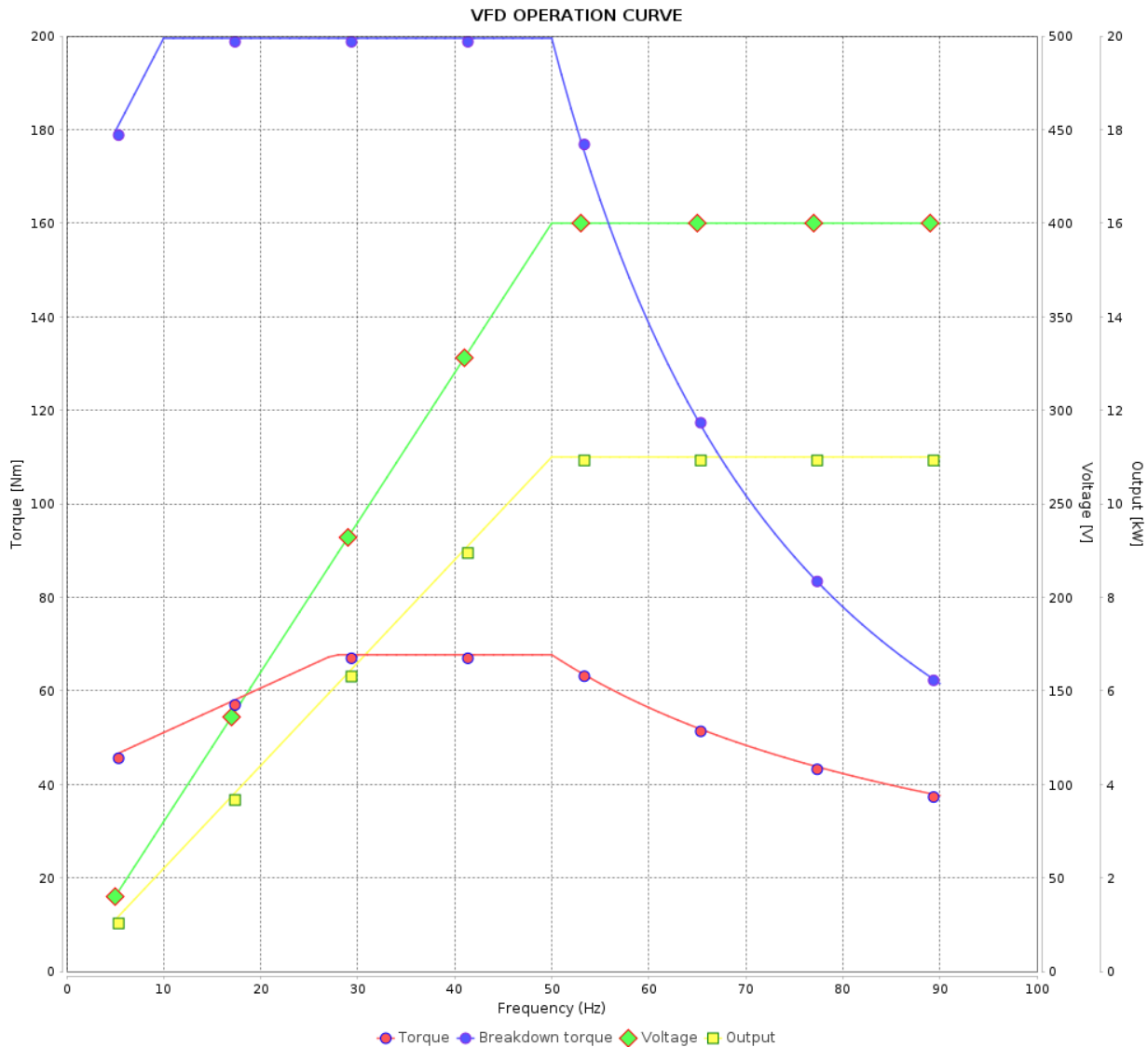
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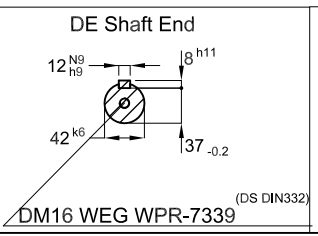
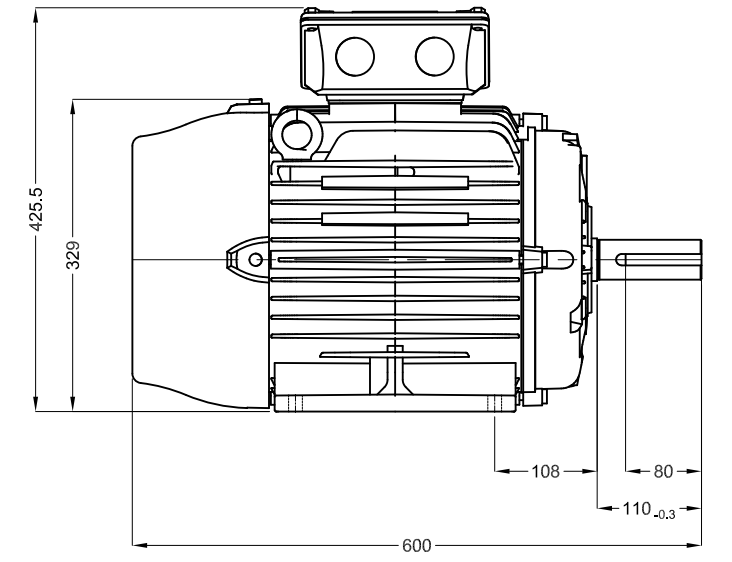
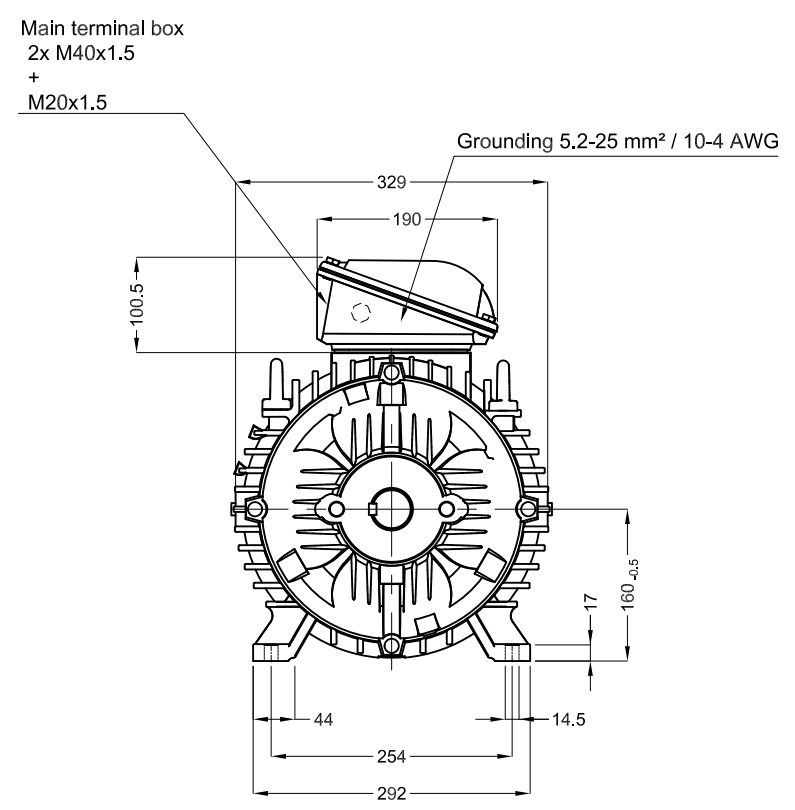
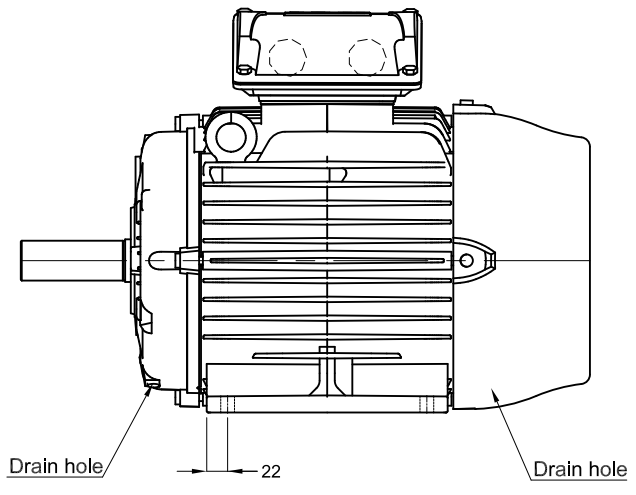


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Without vertical jackscrews
Color RAL 5009
Painting plan 203A
Mounting B3T

11 kW 04 Poles 50 Hz						A
ECM	LOC	SUMMARY OF MODIFICATIONS			HYBRISUSER	00
EXECUTED	HYBRISUSER		THREE PH. MOTOR W22 IE2		PREVIEW WDD 00 SHEET /	
CHECKED			FRAME 160M IP55 TEFC			
RELEASED						
REL. DATE						