

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer : SanRock

Product line : W22Xec IE3 Three-Phase

Product code : 15491104

Frame : 160L
 Output : 15 kW (20 HP)
 Poles : 4
 Frequency : 50 Hz
 Rated voltage : 400/690 V
 Rated current : 28.3/16.4 A
 L. R. Amperes : 198/115 A
 LRC : 7.0
 No load current : 13.0/7.54 A
 Rated speed : 1475 rpm
 Slip : 1.67 %
 Rated torque : 9.91 kgfm
 Locked rotor torque : 270 %
 Breakdown torque : 300 %
 Insulation class : F
 Service factor : 1.00
 Moment of inertia (J) : 0.1534 kgm²
 Design : N

Locked rotor time : 19s (cold) 11s (hot)
 Temperature rise : 80 K
 Duty cycle : S1
 Ambient temperature : -20°C to +40°C
 Altitude : 1000 m.a.s.l.
 Protection degree : IP55
 Cooling method : IC411 - TEFC
 Mounting : B5T
 Rotation¹ : Both (CW and CCW)
 Noise level² : 61.0 dB(A)
 Starting method : Direct On Line
 Approx. weight³ : 157 kg

Output	50%	75%	100%
Efficiency (%)	92.0	92.5	92.3
Power Factor	0.66	0.77	0.83

Foundation loads
 Max. traction : 348 kgf
 Max. compression : 505 kgf

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)
8.2	7.3	7.0	3.8	2.8	1.8	1.3

		<u>Drive end</u>	<u>Non drive end</u>
Bearing type	:	6309 C3	6209 C3
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	13 g	9 g
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	140 °C
2	Winding	Thermistor - 2 wires	1 x Phase	155 °C

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TORQUE AND CURRENT VS SPEED CURVE

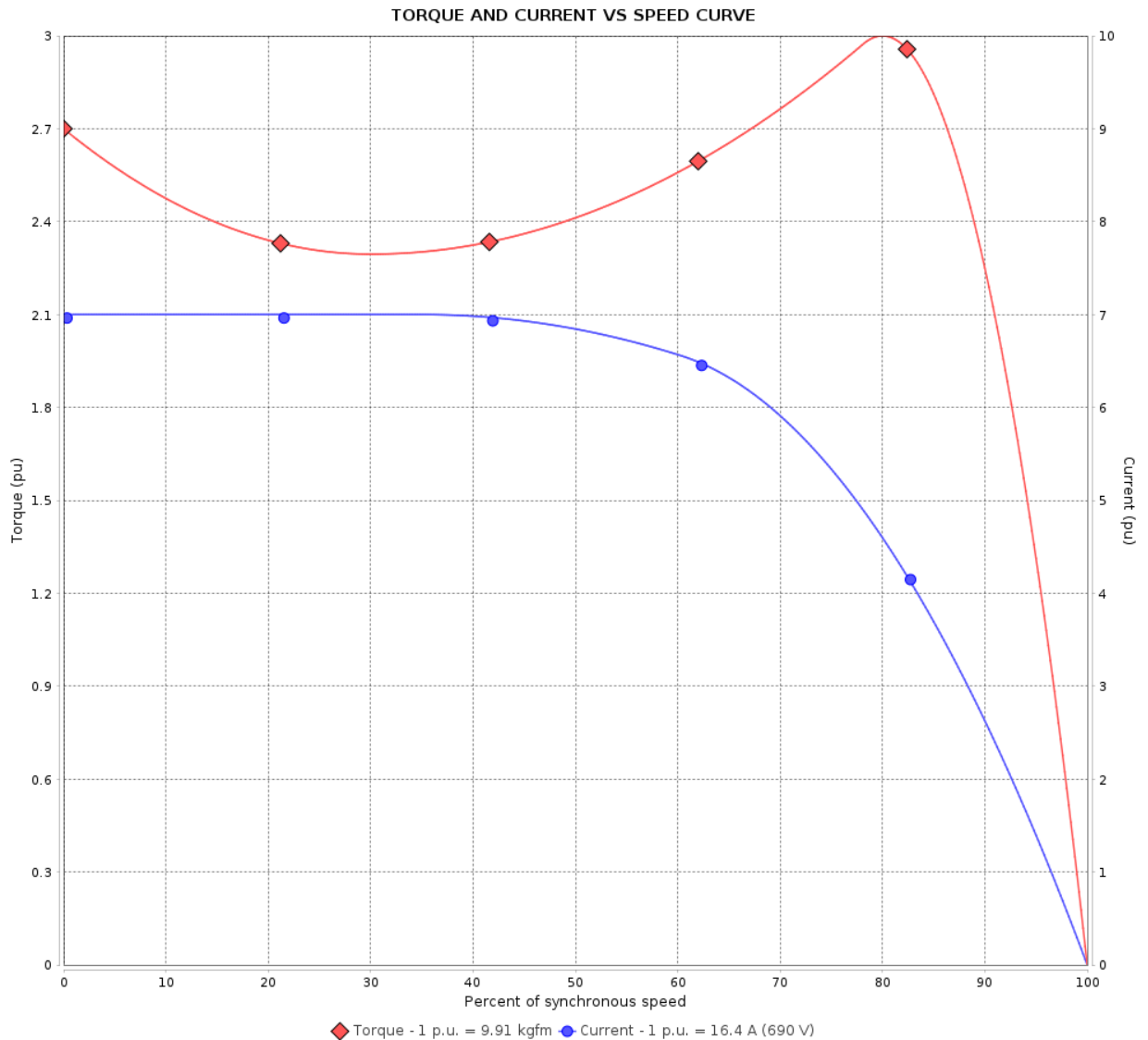
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Performance : 400/690 V 50 Hz 4P

Rated current	: 28.3/16.4 A	Moment of inertia (J)	: 0.1534 kgm ²
LRC	: 7.0	Duty cycle	: S1
Rated torque	: 9.91 kgfm	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.00
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1475 rpm	Design	: N

Locked rotor time : 19s (cold) 11s (hot)

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LOAD PERFORMANCE CURVE

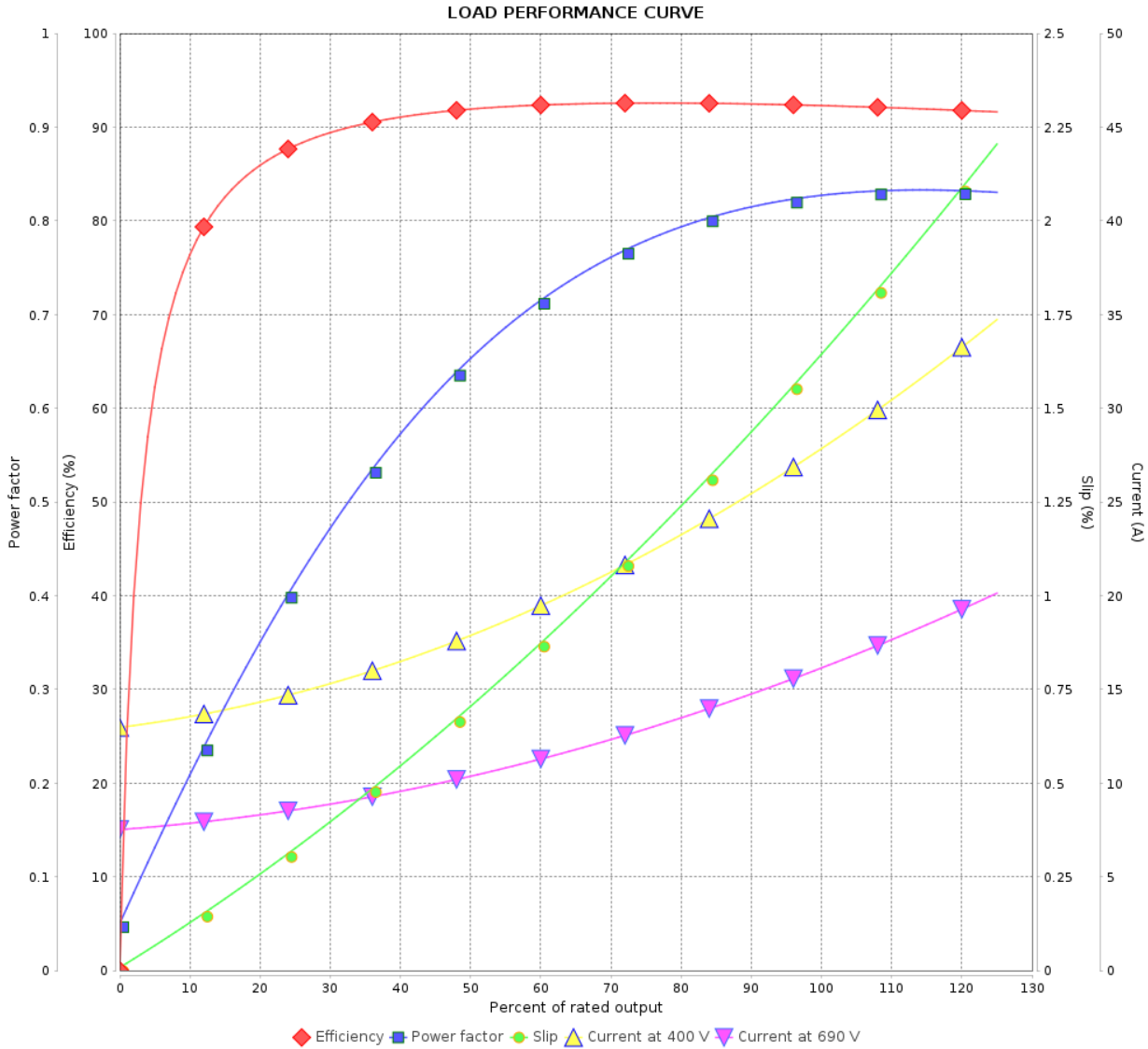
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THERMAL LIMIT CURVE

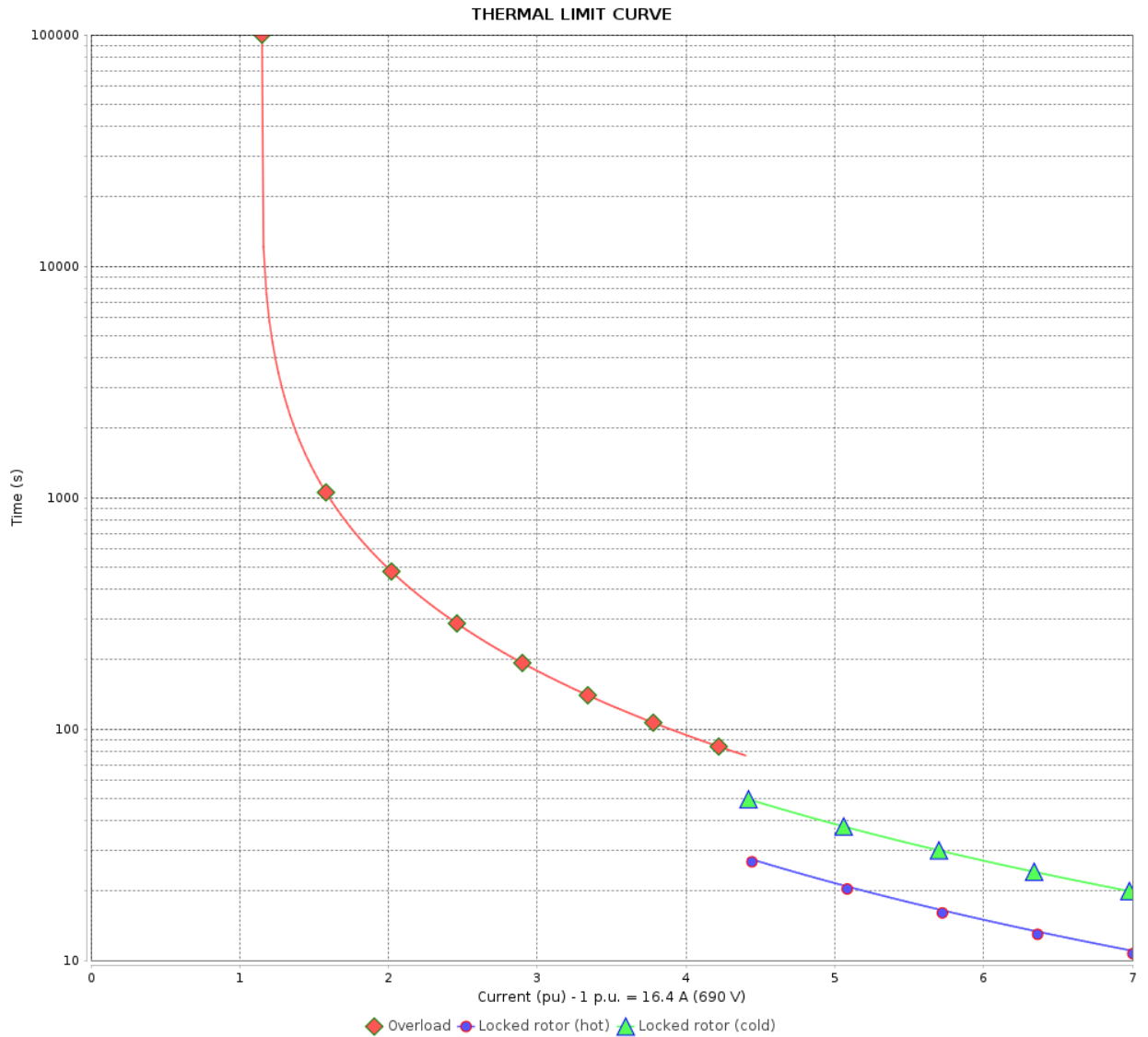
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Heating constant

Cooling constant

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VFD OPERATION CURVE

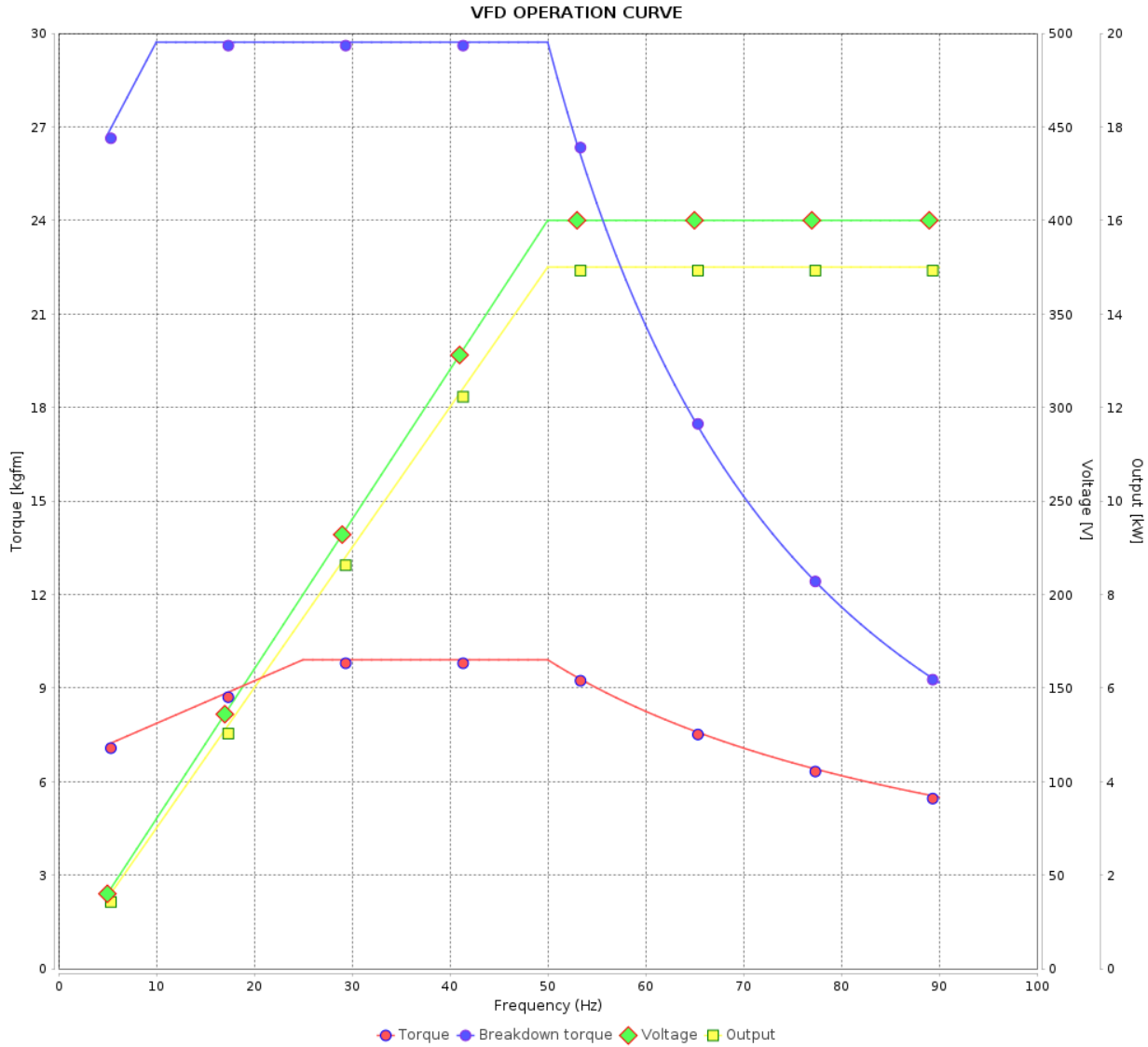
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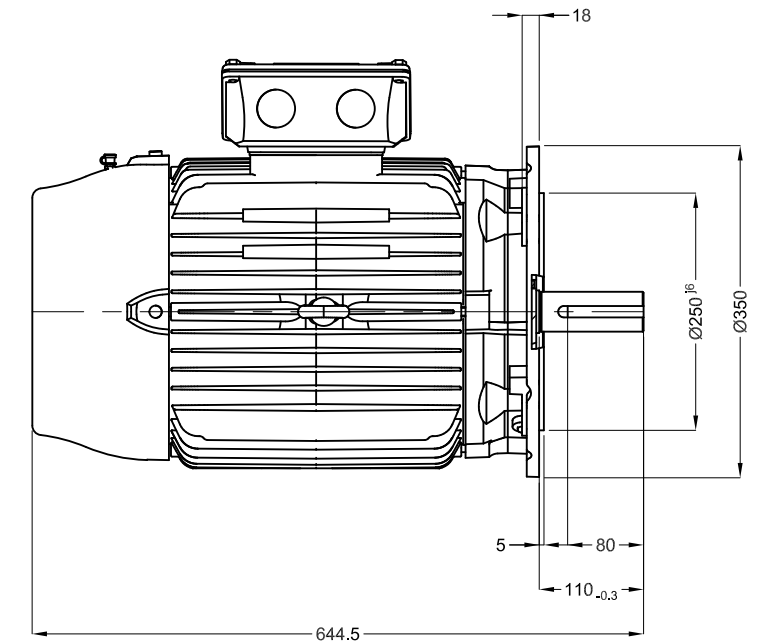
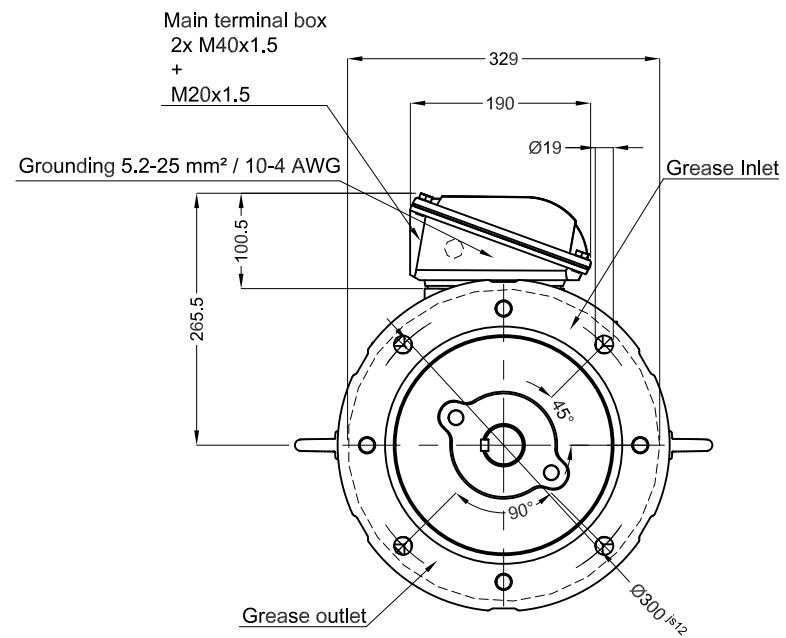
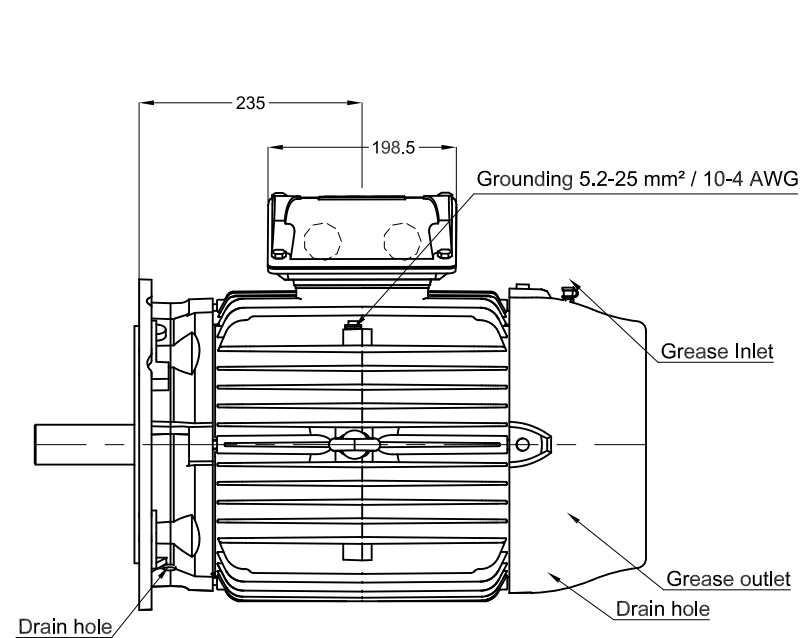


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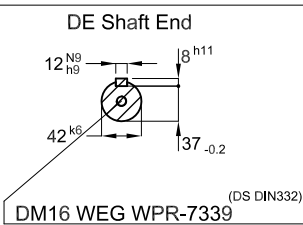
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Color RAL 5009
 Painting plan 203A
 Mounting B5T



15 kW 04 Poles 50 Hz A

ECM		LOC	SUMMARY OF MODIFICATIONS				HYBRISUSER			00
EXECUTED	HYBRISUSER		THREE PH. MOTOR W22Xec IE3	EXECUTED	CHECKED	RELEASED	DATE	VER		
CHECKED			FRAME 160L IP55 TEFC						PREVIEW	
RELEASED									WDD 00	
REL. DATE									SHEET /	

Dimensions in mm

A3