

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 12596563

Frame	: 160M	Cooling method	: IC411 - TEFC
Insulation class	: F	Mounting	: B3L(E)
Duty cycle	: S1	Rotation ¹	: Both (CW and CCW)
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line
Altitude	: 1000 m.a.s.l.	Approx. weight ³	: 126 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0419 kgm ²
Design	: N		

Output [HP]	15	15	15
Poles	2	2	2
Frequency [Hz]	50	50	60
Rated voltage [V]	380	415	230/460
Rated current [A]	21.1	20.2	35.8/17.9
L. R. Amperes [A]	158	172	322/161
LRC [A]	7.5	8.5	9.0
No load current [A]	7.60	9.00	16.0/8.00
Rated speed [RPM]	2950	2955	3560
Slip [%]	1.67	1.50	1.11
Rated torque [kgfm]	3.70	3.68	3.06
Locked rotor torque [%]	240	300	330
Breakdown torque [%]	310	370	400
Service factor	1.00	1.00	1.25
Temperature rise	80 K	80 K	80 K
Locked rotor time	21s (cold) 12s (hot)	19s (cold) 11s (hot)	23s (cold) 13s (hot)
Noise level ²	67.0 dB(A)	67.0 dB(A)	72.0 dB(A)
Efficiency (%)	25%		
	50%	90.7	89.9
	75%	91.2	91.3
	100%	91.2	91.4
Power Factor	25%		
	50%	0.74	0.65
	75%	0.83	0.77
	100%	0.87	0.83

Losses at normative operating points (speed;torque), in percentage of rated output power

Losses (%)	P1 (0,9;1,0)	9.0	8.8	8.4
	P2 (0,5;1,0)	6.5	6.3	6.1
	P3 (0,25;1,0)	5.8	5.7	5.5
	P4 (0,9;0,5)	5.7	5.6	5.4
	P5 (0,5;0,5)	3.3	3.2	3.1
	P6 (0,5;0,25)	2.5	2.5	2.4
	P7 (0,25;0,25)	1.6	1.5	1.5

	Drive end	Non drive end	Foundation loads
Bearing type	: 6309 C3	6209 C3	Max. traction : 129 kgf
Sealing	: V'Ring	V'Ring	Max. compression : 255 kgf
Lubrication interval	: 19000 h	20000 h	
Lubricant amount	: 13 g	9 g	
Lubricant type	: Mobil Polyrex EM		

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 NEMA MG-1.

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date	25/10/2024			

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Revision

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Customer :

Notes

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Date	25/10/2024				

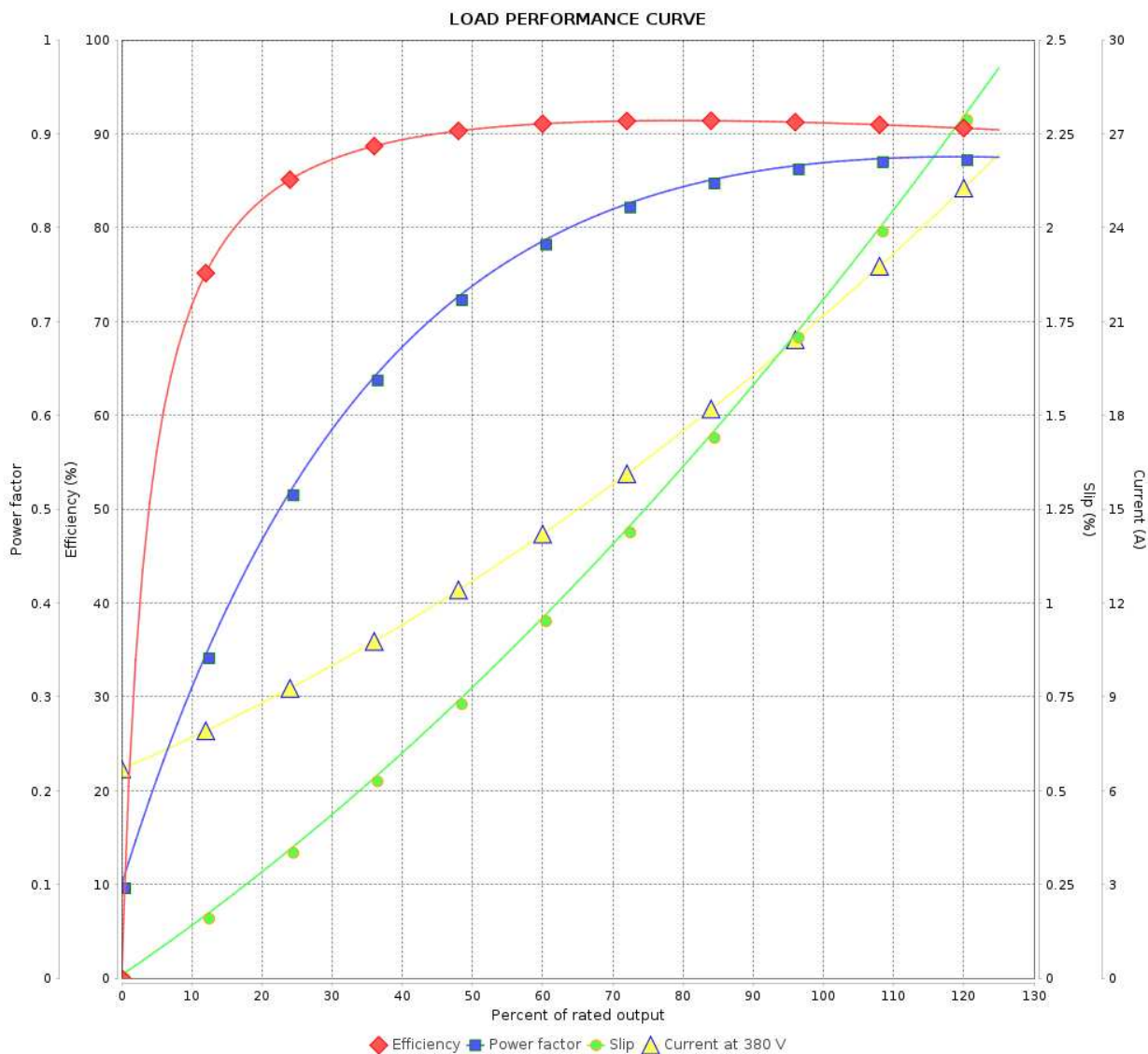
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Customer :

Product line : W22 Tru-Metric IE3 Three-Phase Product code : 12596563



Performance : 380 V 50 Hz 2P

Rated current	: 21.1 A	Moment of inertia (J)	: 0.0419 kgm ²
LRC	: 7.5	Duty cycle	: S1
Rated torque	: 3.70 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.00
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 2950 rpm	Design	: N

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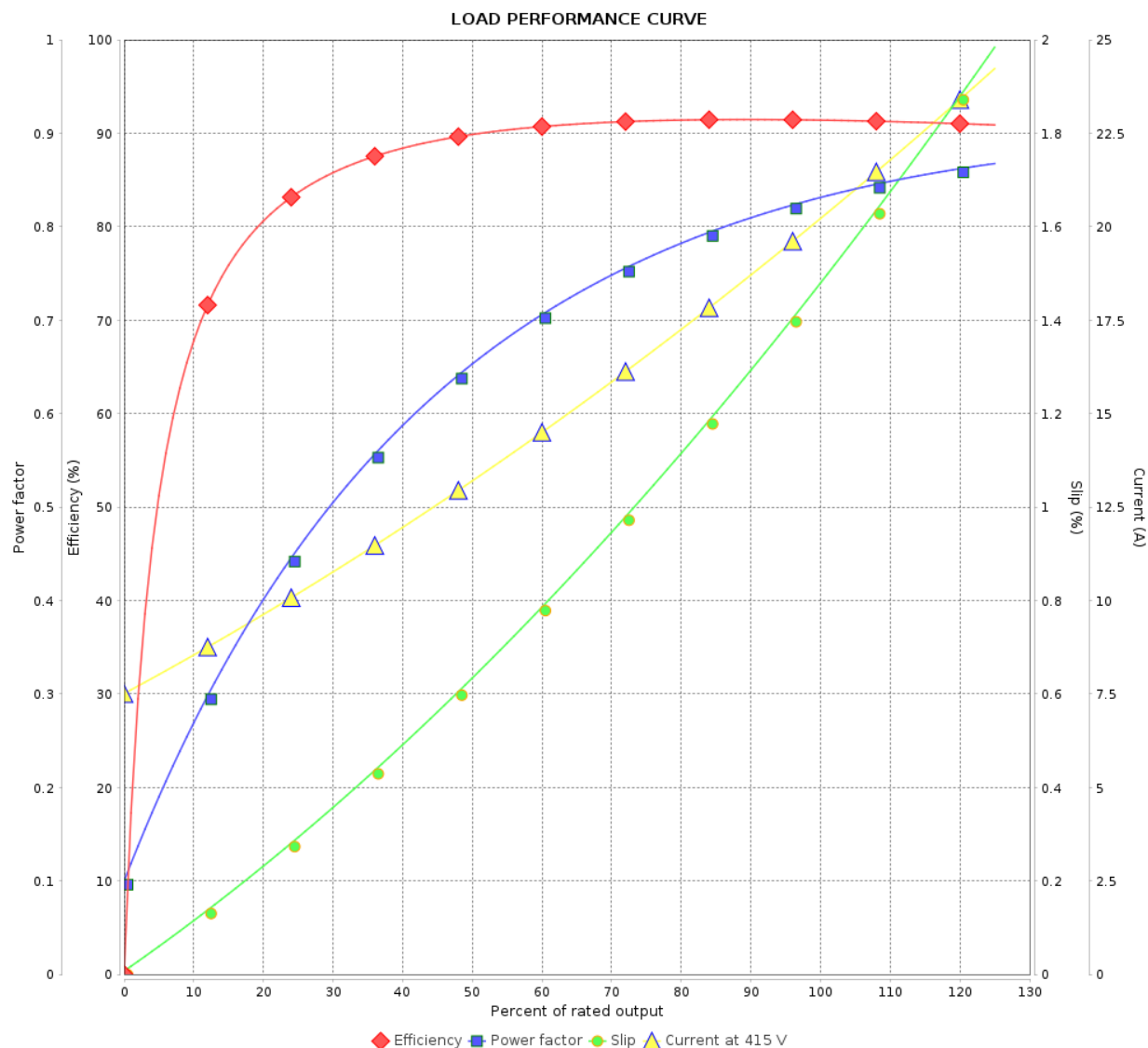
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Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 415 V 50 Hz 2P

Rated current	: 20.2 A	Moment of inertia (J)	: 0.0419 kgm ²
LRC	: 8.5	Duty cycle	: S1
Rated torque	: 3.68 kgfm	Insulation class	: F
Locked rotor torque	: 300 %	Service factor	: 1.00
Breakdown torque	: 370 %	Temperature rise	: 80 K
Rated speed	: 2955 rpm	Design	: N

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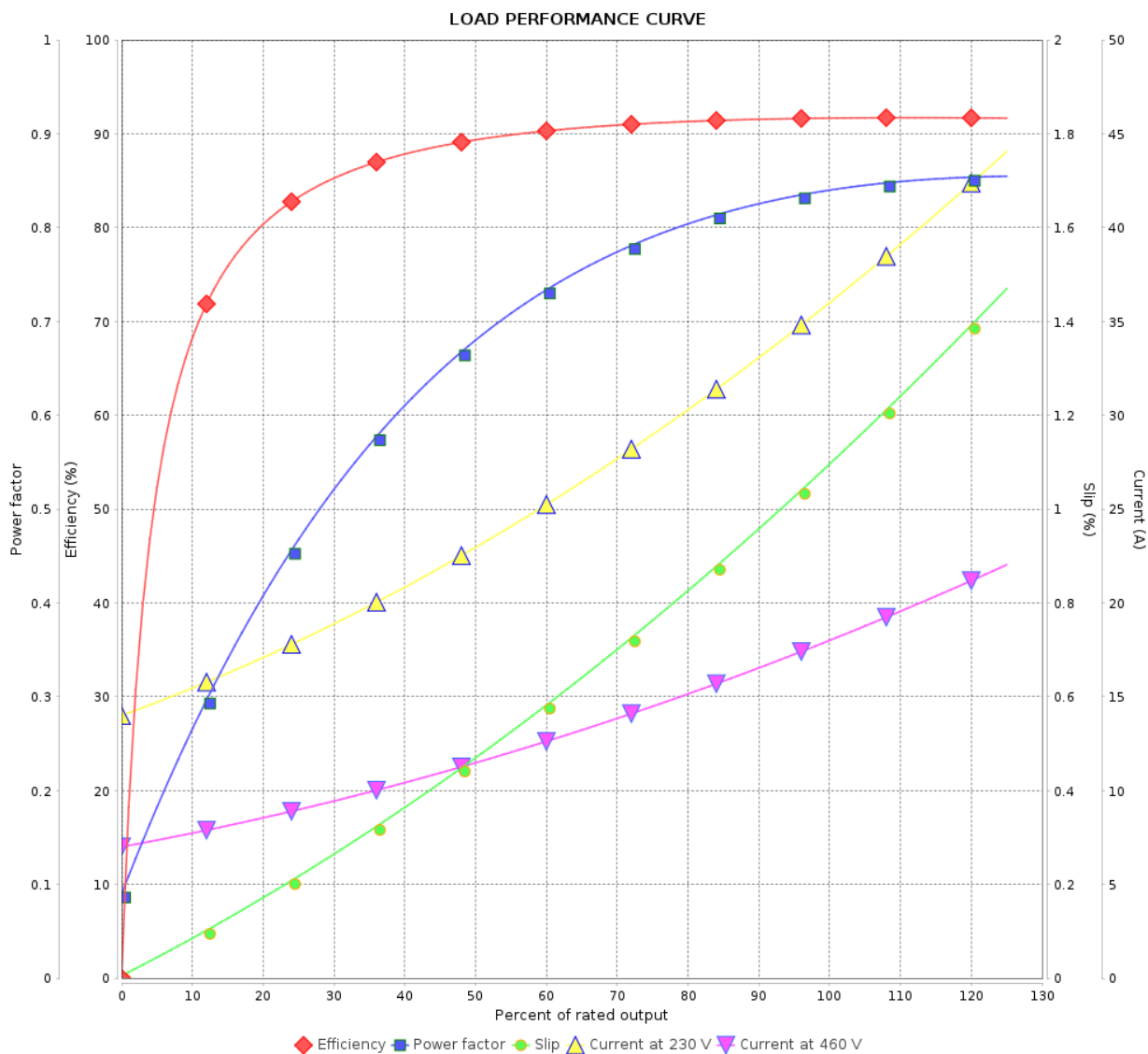
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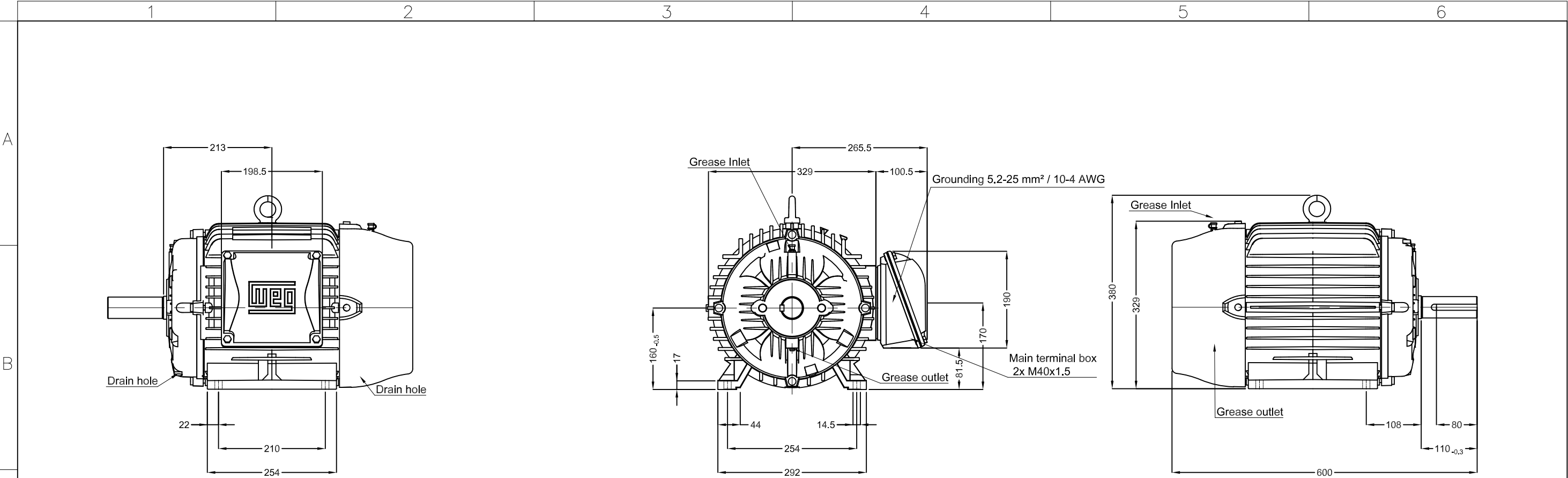


Performance : 230/460 V 60 Hz 2P

Rated current : 35.8/17.9 A
LRC : 9.0
Rated torque : 3.06 kgfm
Locked rotor torque : 330 %
Breakdown torque : 400 %
Rated speed : 3560 rpm

Moment of inertia (J) : 0.0419 kgm²
Duty cycle : S1
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : N

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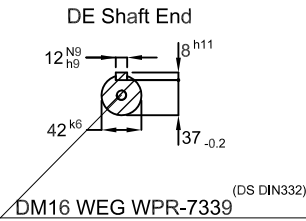


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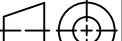
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E

Without vertical jackscrews
Color RAL 5009
Painting plan 203A
Mounting B3L(E)



15 HP 02 Poles 60 Hz A

						HYBRISUSER				00	
ECM	LOC	SUMMARY OF MODIFICATIONS				EXECUTED	CHECKED	RELEASED	DATE	VER	
EXECUTED	HYBRISUSER			THREE PH. MOTOR W22 IE3 FRAME 160M IP55 TEFC				PREVIEW WDD 00			
CHECKED											
RELEASED											
REL. DATE						SHEET					