

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line	: W22 NEMA Premium Efficiency Three-Phase	Product code :	11355724		
Frame	: 364/5T	Cooling method	: IC411 - TEFC		
Insulation class	: F	Mounting	: F-1		
Duty cycle	: Cont.(S1)	Rotation <sup>1</sup>	: Both (CW and CCW)		
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line		
Altitude	: 1000 m.a.s.l.	Approx. weight <sup>3</sup>	: 350 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.9884 kgm <sup>2</sup>		
Design	: B				
Output [HP]	30	30	30	30	
Poles	8	8	8	8	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	76.2/38.1	45.5	43.3	42.2	
L. R. Amperes [A]	472/236	223	238	249	
LRC [A]	6.2x(Code G)	4.9x(Code E)	5.5x(Code F)	5.9x(Code G)	
No load current [A]	32.0/16.0	16.0	17.0	18.0	
Rated speed [RPM]	882	725	725	730	
Slip [%]	2.00	3.33	3.33	2.67	
Rated torque [kgfm]	24.7	30.0	30.0	29.8	
Locked rotor torque [%]	160	120	140	150	
Breakdown torque [%]	229	160	190	200	
Service factor	1.25	1.00	1.00	1.00	
Temperature rise	80 K	105 K	105 K	105 K	
Locked rotor time	45s (cold) 25s (hot)	30s (cold) 17s (hot)	34s (cold) 19s (hot)	32s (cold) 18s (hot)	
Noise level <sup>2</sup>	60.0 dB(A)	56.0 dB(A)	56.0 dB(A)	56.0 dB(A)	
Efficiency (%)	25%	91.3	88.7	90.2	90.3
	50%	91.5	89.0	90.5	90.5
	75%	91.7	89.5	90.6	90.6
	100%	91.7	89.5	90.6	90.6
Power Factor	25%	0.39	0.47	0.43	0.40
	50%	0.62	0.71	0.67	0.65
	75%	0.73	0.79	0.77	0.75
	100%	0.79	0.82	0.81	0.80
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	8.9	8.9	8.9	8.9
	P2 (0,5;1,0)	7.7	7.7	7.7	7.7
	P3 (0,25;1,0)	7.2	7.2	7.2	7.2
	P4 (0,9;0,5)	3.9	3.9	3.9	3.9
	P5 (0,5;0,5)	2.8	2.8	2.8	2.8
	P6 (0,5;0,25)	1.7	1.7	1.7	1.7
	P7 (0,25;0,25)	1.3	1.3	1.3	1.3
Bearing type	: Drive end : 6314 C3	Non drive end : 6314 C3	Foundation loads		
Sealing	: WSeal	WSeal	Max. traction	: 495 kgf	
Lubrication interval	: 20000 h	20000 h	Max. compression	: 845 kgf	
Lubricant amount	: 27 g	27 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.			These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.		
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## Three Phase Induction Motor - Squirrel Cage



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

Notes  
USABLE @208V 81.8A SF 1.10 SFA 90.0A

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# LOAD PERFORMANCE CURVE

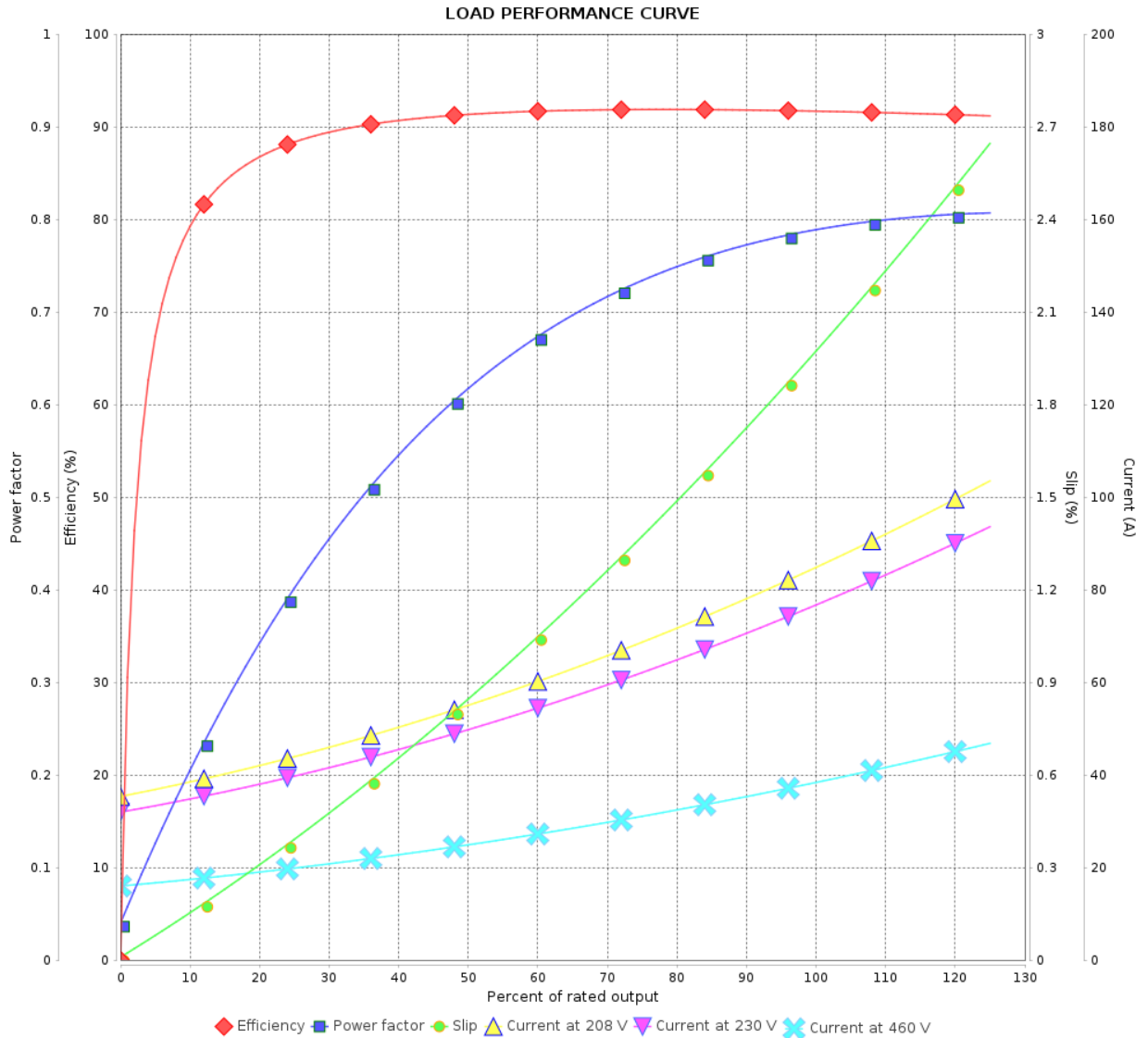
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11355724



Performance : 230/460 V 60 Hz 8P

Rated current : 76.2/38.1 A  
 LRC : 6.2  
 Rated torque : 24.7 kgfm  
 Locked rotor torque : 160 %  
 Breakdown torque : 229 %  
 Rated speed : 882 rpm

Moment of inertia (J) : 0.9884 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

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Date				

# LOAD PERFORMANCE CURVE

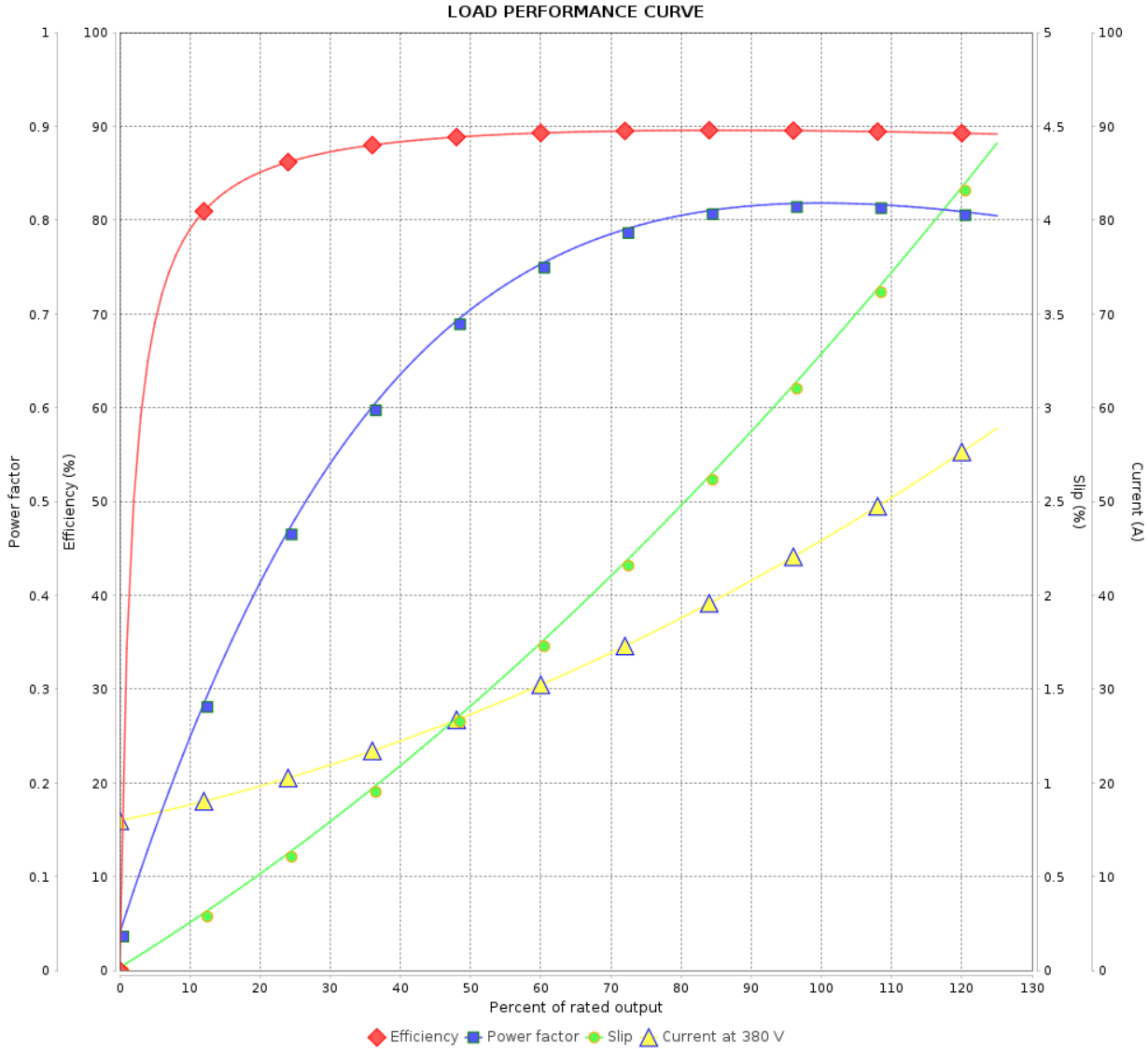
Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11355724



Performance : 380 V 50 Hz 8P IE2

Rated current : 45.5 A  
 LRC : 4.9  
 Rated torque : 30.0 kgfm  
 Locked rotor torque : 120 %  
 Breakdown torque : 160 %  
 Rated speed : 725 rpm

Moment of inertia (J) : 0.9884 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 105 K  
 Design : B

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# LOAD PERFORMANCE CURVE

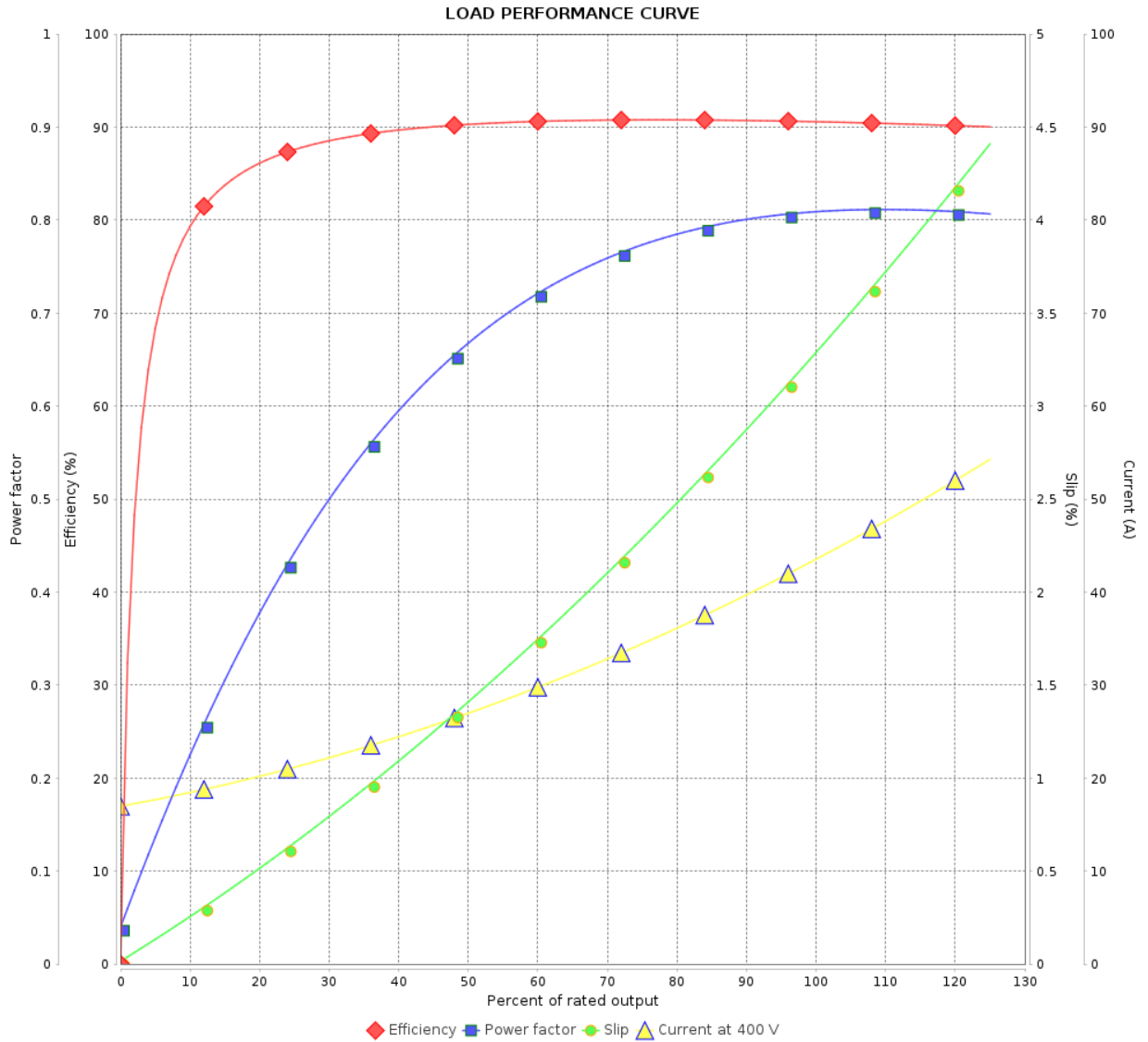
## Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11355724



Performance : 400 V 50 Hz 8P IE3

Rated current : 43.3 A  
 LRC : 5.5  
 Rated torque : 30.0 kgfm  
 Locked rotor torque : 140 %  
 Breakdown torque : 190 %  
 Rated speed : 725 rpm

Moment of inertia (J) : 0.9884 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 105 K  
 Design : B

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# LOAD PERFORMANCE CURVE

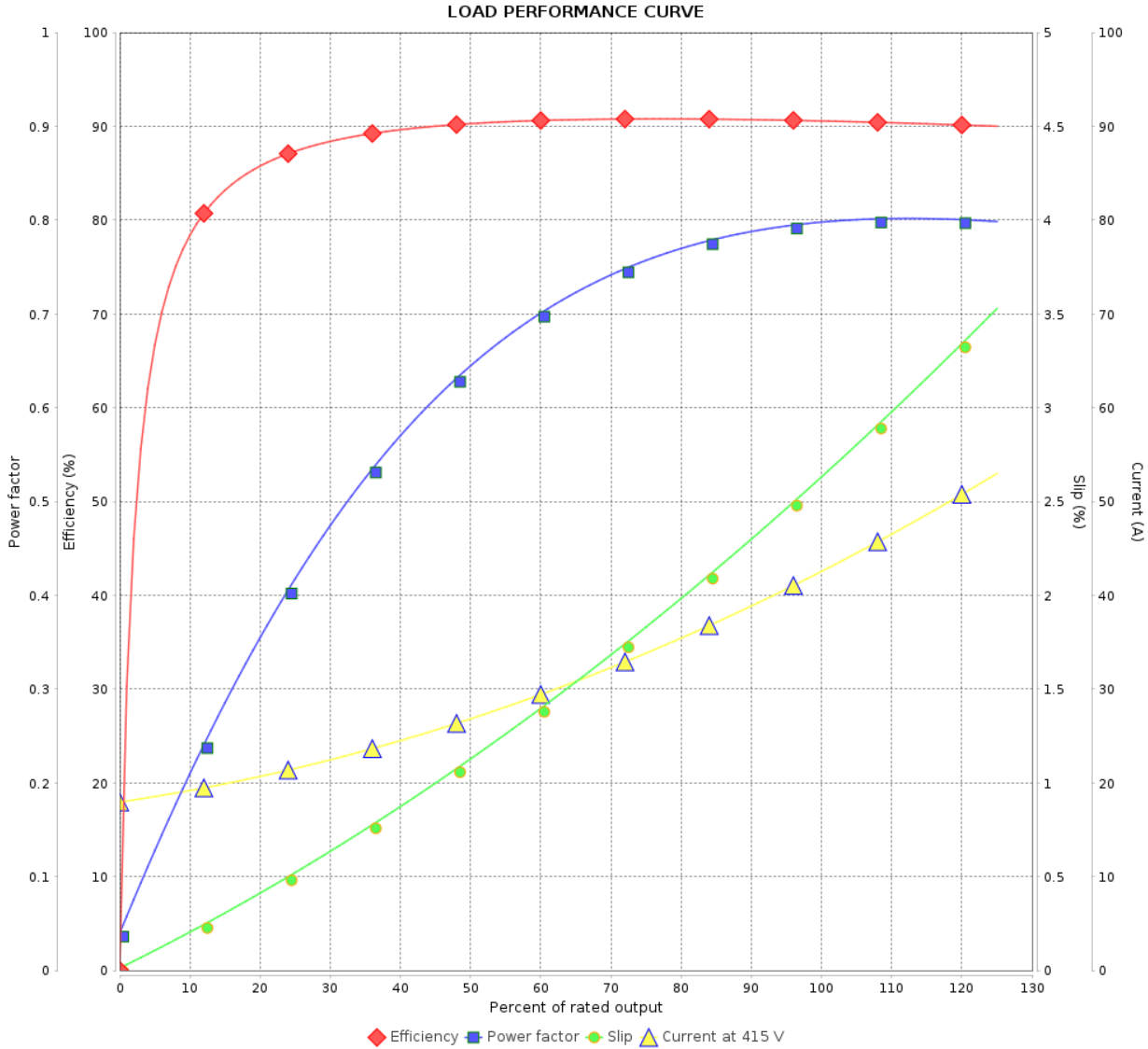
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 11355724

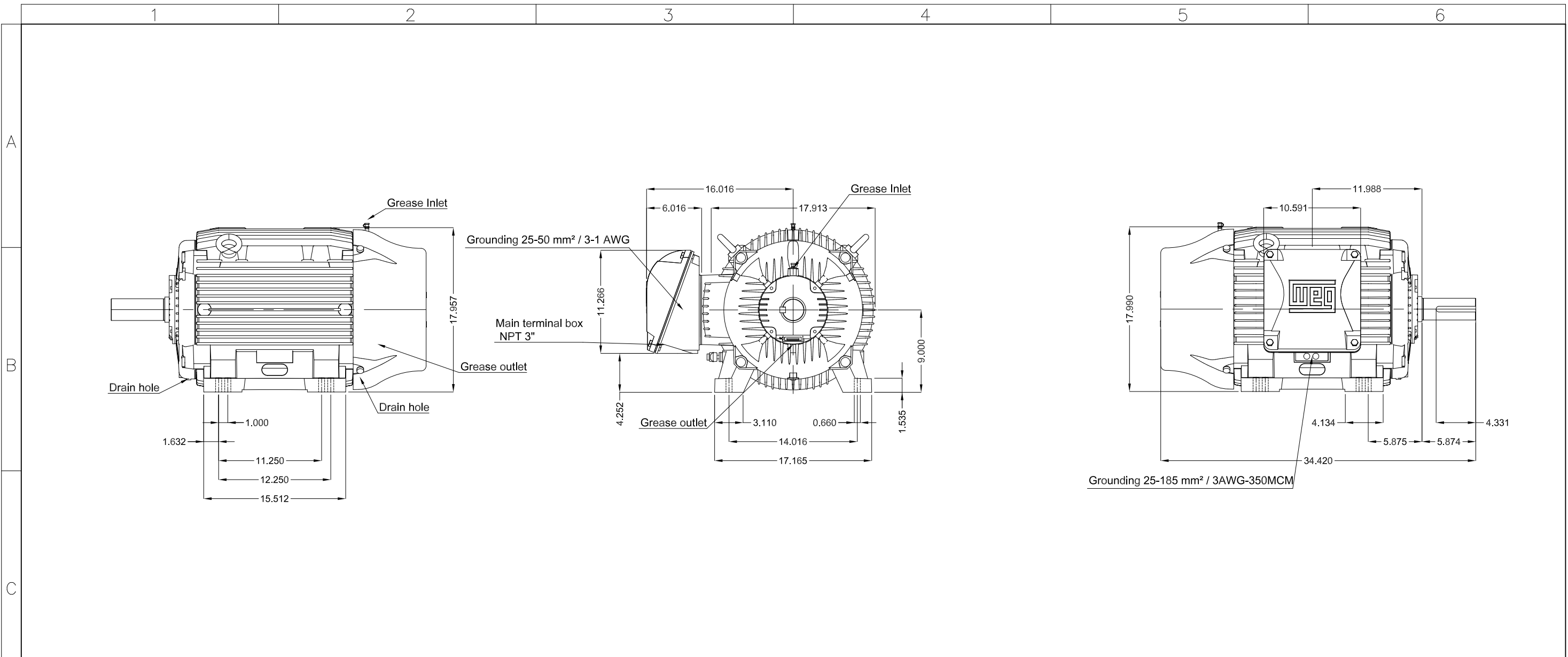


Performance : 415 V 50 Hz 8P IE3

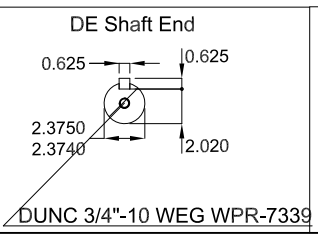
Rated current : 42.2 A  
 LRC : 5.9  
 Rated torque : 29.8 kgfm  
 Locked rotor torque : 150 %  
 Breakdown torque : 200 %  
 Rated speed : 730 rpm

Moment of inertia (J) : 0.9884 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 105 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
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D					30 HP 08 Poles 60 Hz		A
E							



Color RAL 5009  
 Painting plan 203A  
 Mounting B3R(D)

HYBRISUSER								00
ECM	LOC	SUMMARY OF MODIFICATIONS		EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	THREE PH. MOTOR W22 NEMA PREM. EFF.						
CHECKED		FRAME 364/5T IP55 TEFC						
RELEASED								
REL. DATE								
				PREVIEW		WDD 00		
				SHEET /				