

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



Customer :					
Product line		: W22 P Base NEMA Premium Efficiency Three-Phase	Product code : 13017464		
Frame : 404/5HP		Cooling method : IC411 - TEFC			
Insulation class : F		Mounting : W-6			
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> : 511 kg			
Protection degree : IP55		Moment of inertia (J) : 0.5561 kgm <sup>2</sup>			
Design : B					
Output [HP]	100	75	75	75	
Poles	2	2	2	2	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	224/112	99.6	94.6	92.2	
L. R. Amperes [A]	1456/728	677	719	756	
LRC [A]	6.5x(Code G)	6.8x(Code G)	7.6x(Code H)	8.2x(Code J)	
No load current [A]	52.0/26.0	25.7	27.5	29.1	
Rated speed [RPM]	3545	2955	2960	2965	
Slip [%]	1.53	1.50	1.33	1.17	
Rated torque [kgfm]	20.5	18.4	18.4	18.4	
Locked rotor torque [%]	240	250	280	300	
Breakdown torque [%]	260	280	310	330	
Service factor	1.25	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	25s (cold) 14s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	
Noise level <sup>2</sup>	79.0 dB(A)	74.0 dB(A)	74.0 dB(A)	74.0 dB(A)	
Efficiency (%)	25%				
	50%	93.0	93.0	93.1	
	75%	94.1	93.8	93.8	
	100%	94.1	94.3	94.3	
Power Factor	25%				
	50%	0.83	0.82	0.80	
	75%	0.88	0.88	0.86	
	100%	0.89	0.89	0.89	
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	5.9	5.9	5.9	5.9
	P2 (0,5;1,0)	4.6	4.6	4.6	4.6
	P3 (0,25;1,0)	4.4	4.4	4.4	4.4
	P4 (0,9;0,5)	2.8	2.8	2.8	2.8
	P5 (0,5;0,5)	1.6	1.6	1.6	1.6
	P6 (0,5;0,25)	0.9	0.9	0.9	0.9
	P7 (0,25;0,25)	0.5	0.5	0.5	0.5
Bearing type		Drive end : 6316 C3	Non drive end : 6314 C3	Foundation loads	
Sealing		Lip Seal		Max. traction	
Lubrication interval		2000 h		Max. compression	
Lubricant amount		34 g			
Lubricant type		Isoflex NBU-15			
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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Customer : \_\_\_\_\_

Notes  
USABLE @208V 243A SF 1.10 SFA 268A

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# LOAD PERFORMANCE CURVE

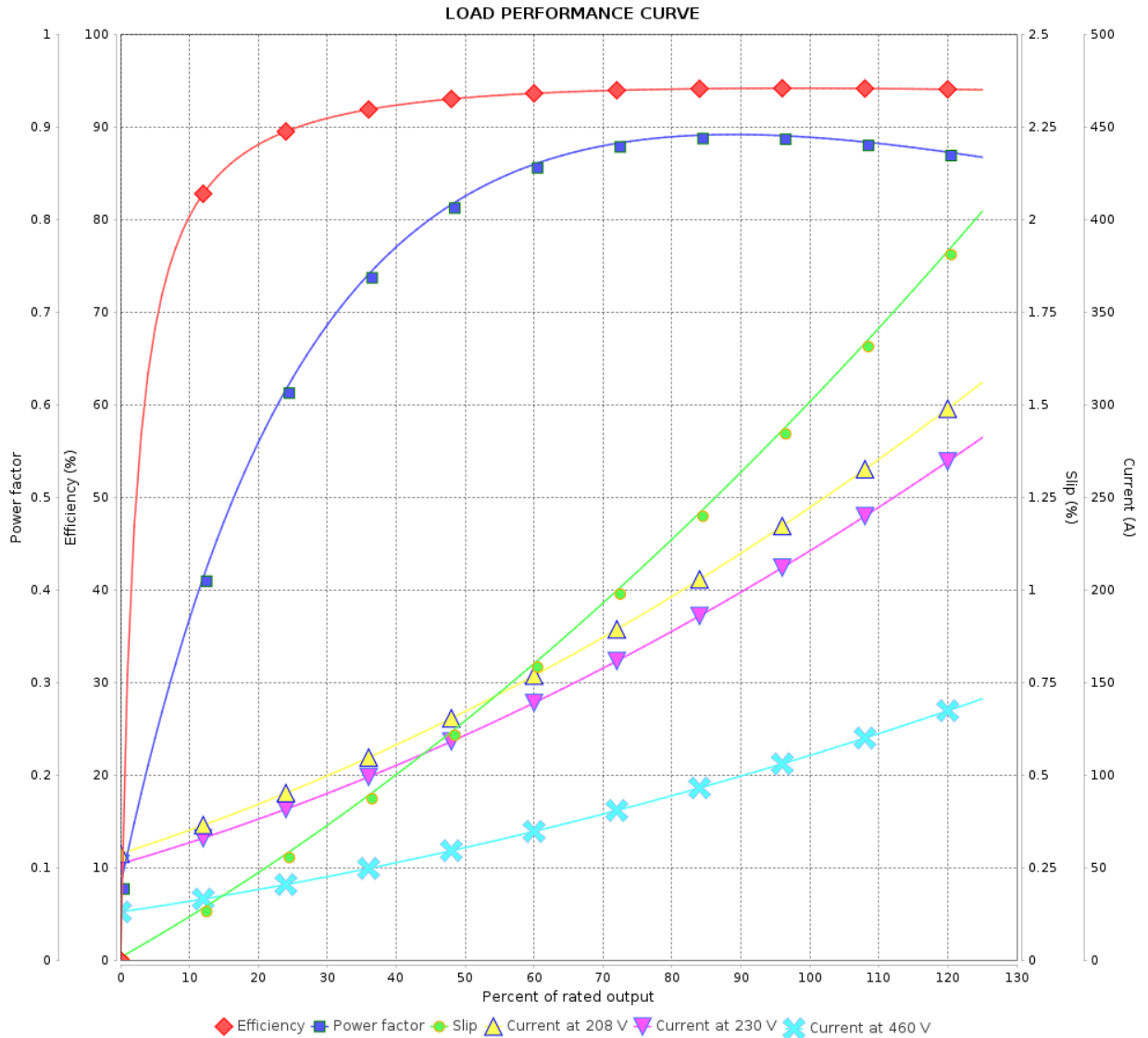
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 P Base NEMA Premium Efficiency Three-Phase

Product code : 13017464



Performance : 230/460 V 60 Hz 2P

Rated current : 224/112 A  
 LRC : 6.5  
 Rated torque : 20.5 kgfm  
 Locked rotor torque : 240 %  
 Breakdown torque : 260 %  
 Rated speed : 3545 rpm

Moment of inertia (J) : 0.5561 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.25  
 Temperature rise : 80 K  
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
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Date				

# LOAD PERFORMANCE CURVE

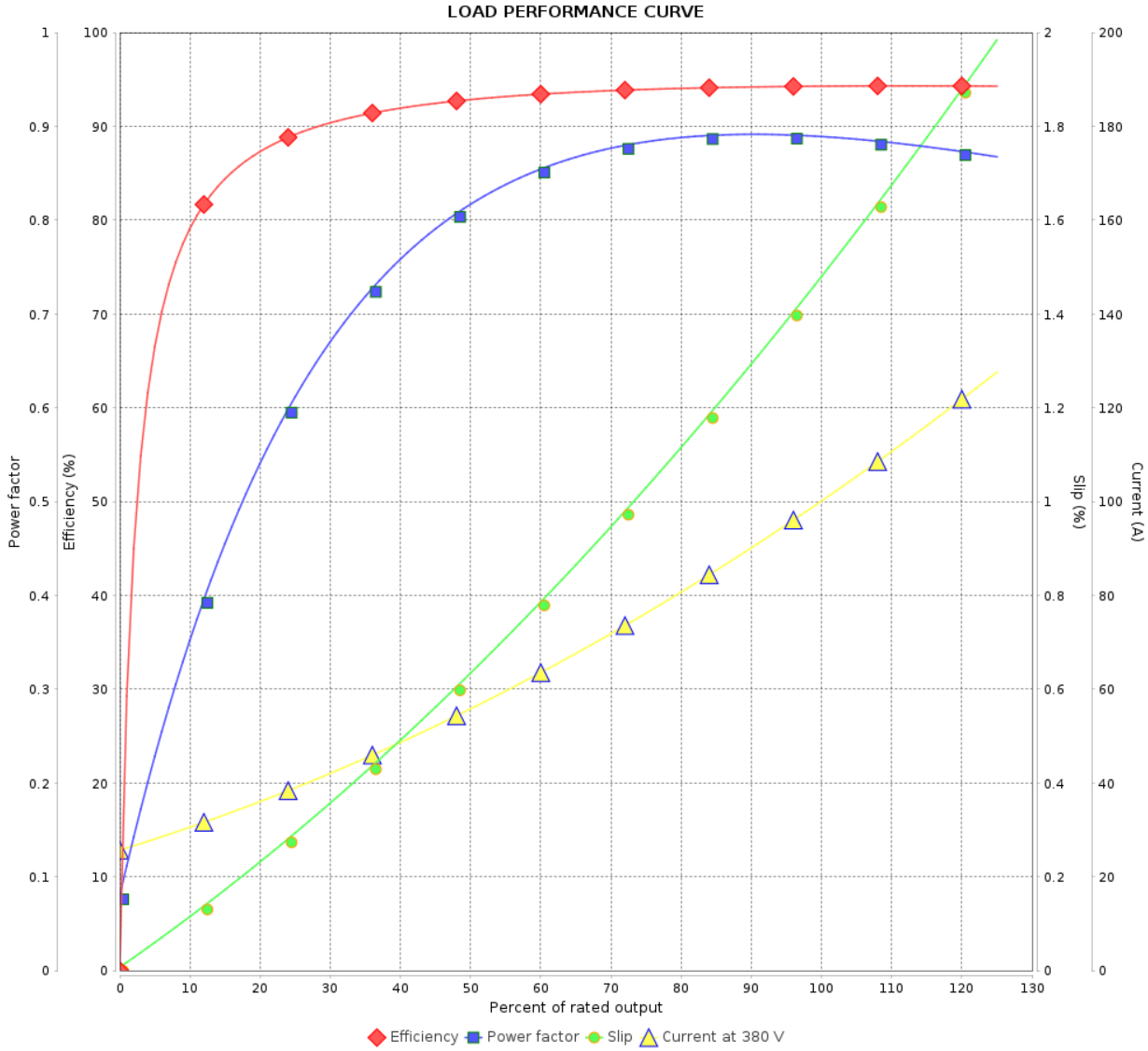
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 P Base NEMA Premium  
Efficiency Three-Phase

Product code : 13017464



Performance : 380 V 50 Hz 2P IE3

Rated current : 99.6 A  
 LRC : 6.8  
 Rated torque : 18.4 kgfm  
 Locked rotor torque : 250 %  
 Breakdown torque : 280 %  
 Rated speed : 2955 rpm

Moment of inertia (J) : 0.5561 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

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# LOAD PERFORMANCE CURVE

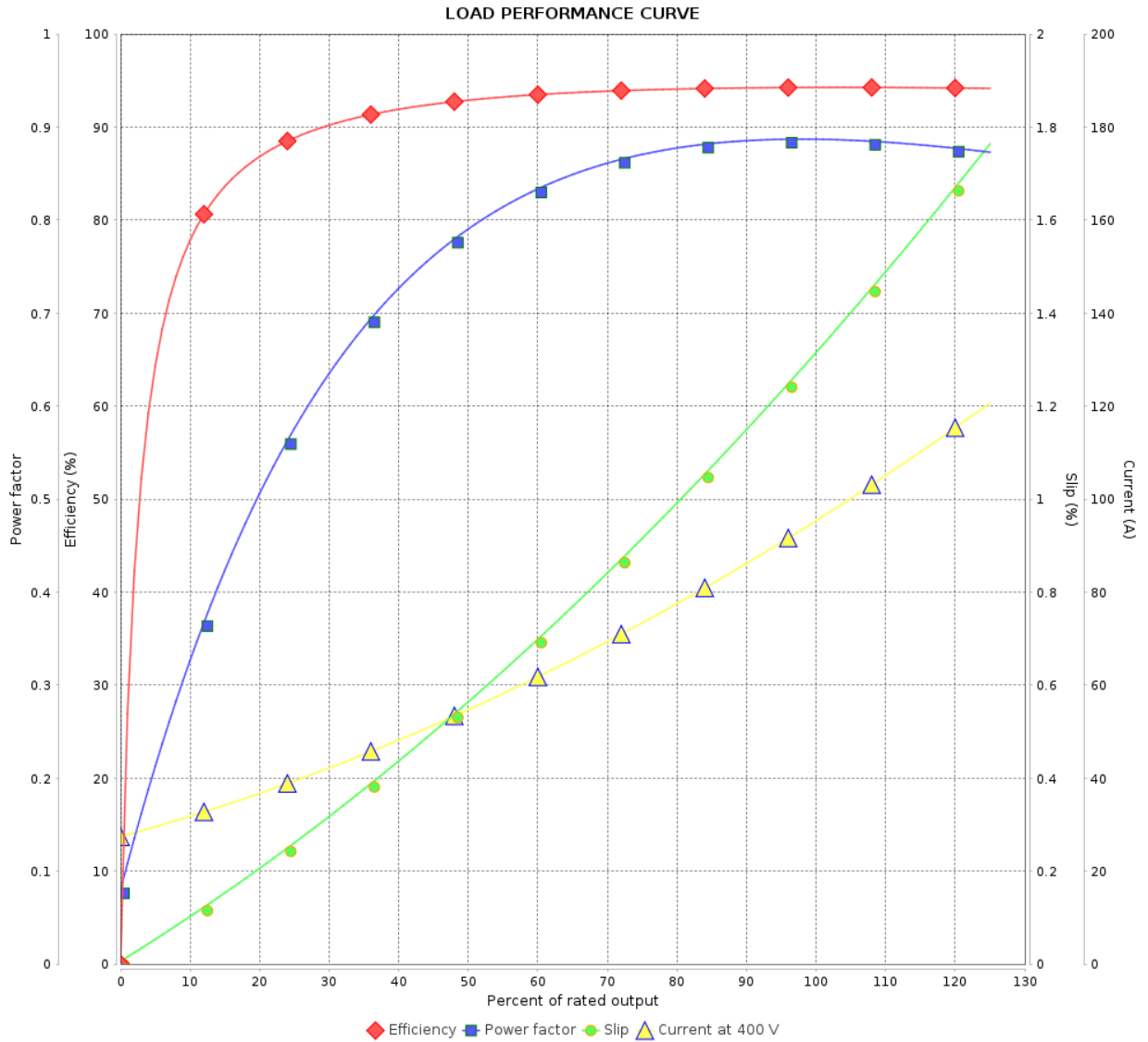
## Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 P Base NEMA Premium Efficiency Three-Phase

Product code : 13017464



Performance : 400 V 50 Hz 2P IE3

Rated current : 94.6 A  
 LRC : 7.6  
 Rated torque : 18.4 kgfm  
 Locked rotor torque : 280 %  
 Breakdown torque : 310 %  
 Rated speed : 2960 rpm

Moment of inertia (J) : 0.5561 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

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# LOAD PERFORMANCE CURVE

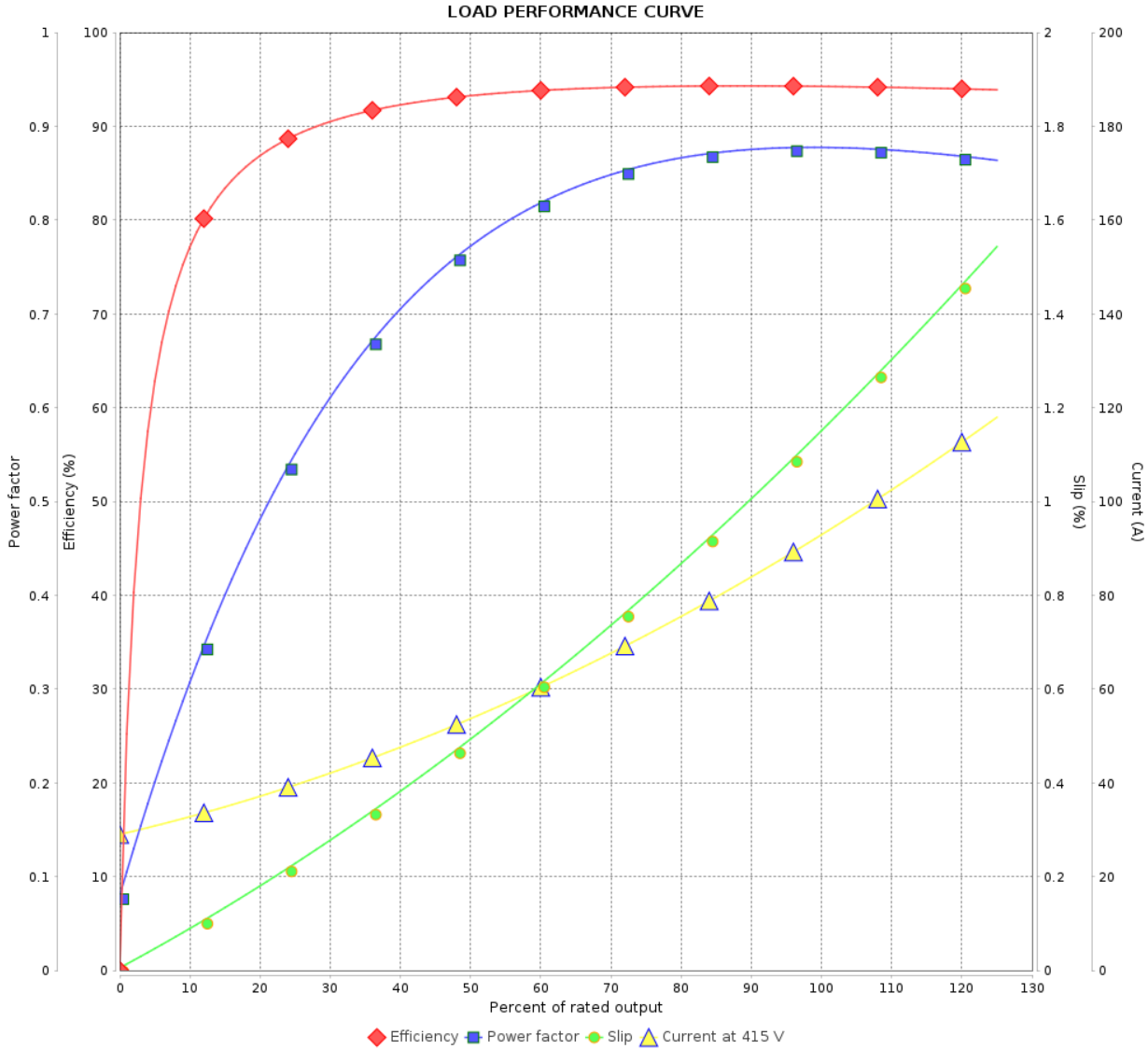
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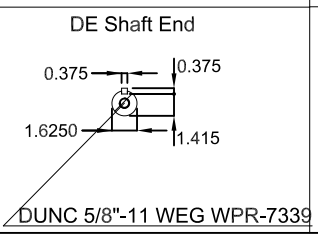
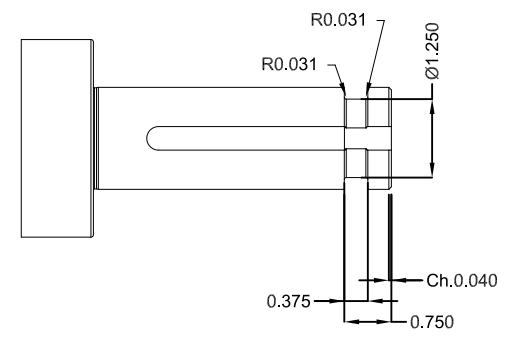
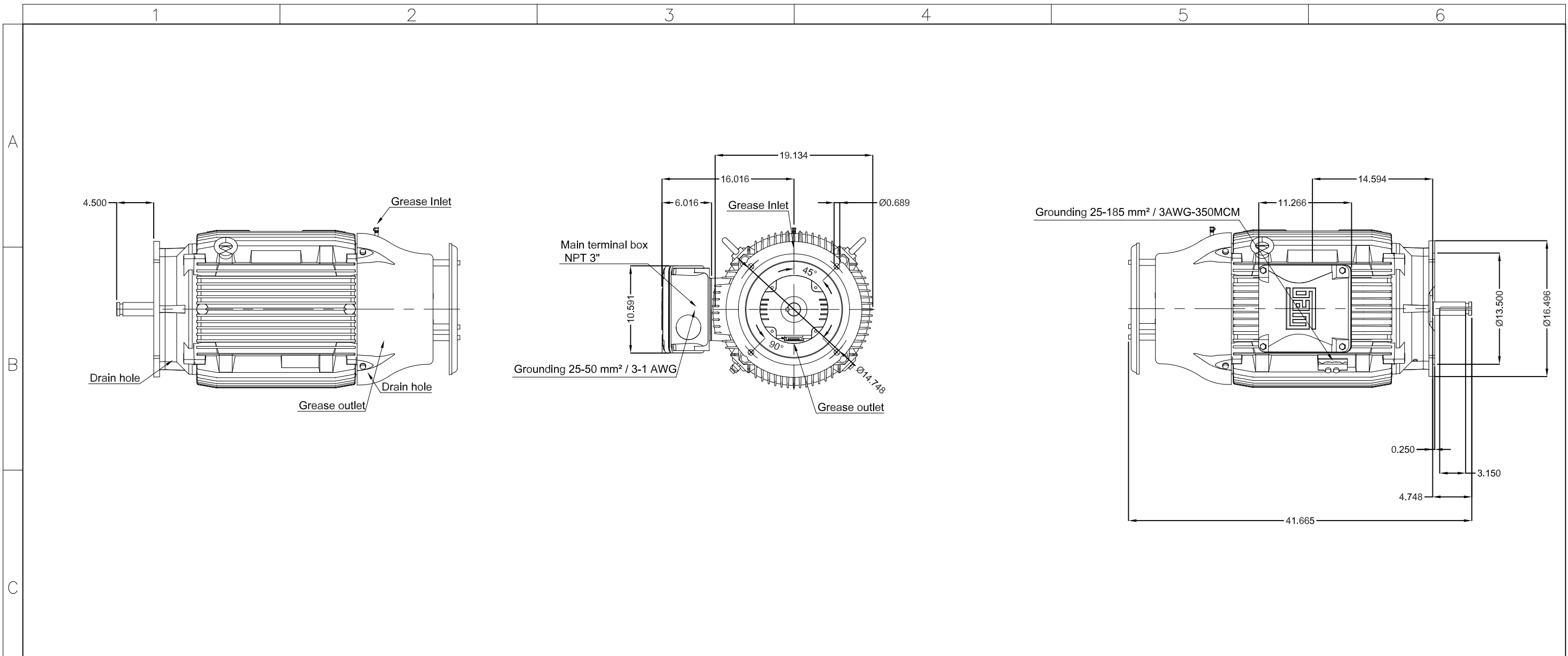


Performance : 415 V 50 Hz 2P IE3

Rated current : 92.2 A  
 LRC : 8.2  
 Rated torque : 18.4 kgfm  
 Locked rotor torque : 300 %  
 Breakdown torque : 330 %  
 Rated speed : 2965 rpm

Moment of inertia (J) : 0.5561 kgm<sup>2</sup>  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.00  
 Temperature rise : 80 K  
 Design : B

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Color RAL 5009  
 Painting plan 203A  
 Mounting NEMA W-6  
 Mounting V1

DUNC 5/8"-11 WEG WPR-7339

100 HP 02 Poles 60 Hz										A	
HYBRISUSER										00	
ECM	LOC	SUMMARY OF MODIFICATIONS					EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	THREE PH. MOTOR W22 P. BASE NEMA PREM. EFF.					EXECUTED	CHECKED	RELEASED	DATE	VER
CHECKED		FRAME 404/5HP IP55 TEFC					EXECUTED	CHECKED	RELEASED	DATE	VER
RELEASED							EXECUTED	CHECKED	RELEASED	DATE	VER
REL. DATE							EXECUTED	CHECKED	RELEASED	DATE	VER
						PREVIEW		WDD 00		SHEET /	
						WEG					