

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



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

Product line : W22 P Base NEMA Premium Efficiency Three-Phase      Product code : 13017860

Frame	: 143HP	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>	: 23.3 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.0049 kgm <sup>2</sup>
Design	: B		

	1	1	1	1
Output [HP]	1	1	1	1
Poles	4	4	4	4
Frequency [Hz]	60	50	50	50
Rated voltage [V]	230/460	380	400	415
Rated current [A]	2.94/1.47	1.71	1.65	1.63
L. R. Amperes [A]	25.3/12.6	10.9	11.5	12.1
LRC [A]	8.6x(Code M)	6.4x(Code J)	7.0x(Code K)	7.4x(Code K)
No load current [A]	1.88/0.940	0.930	1.00	1.08
Rated speed [RPM]	1760	1450	1455	1455
Slip [%]	2.22	3.33	3.00	3.00
Rated torque [kgfm]	0.412	0.501	0.499	0.499
Locked rotor torque [%]	290	220	240	260
Breakdown torque [%]	350	250	290	310
Service factor	1.25	1.25	1.25	1.25
Temperature rise	80 K	80 K	80 K	80 K
Locked rotor time	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)	32s (cold) 18s (hot)
Noise level <sup>2</sup>	51.0 dB(A)	49.0 dB(A)	49.0 dB(A)	49.0 dB(A)
Efficiency (%)	25%			
	50%	80.0	80.0	80.0
	75%	84.0	82.5	82.5
	100%	85.5	82.5	84.0
Power Factor	25%			
	50%	0.55	0.62	0.58
	75%	0.68	0.74	0.71
	100%	0.75	0.81	0.78

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

Losses (%)	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)	
	Drive end	Non drive end	Drive end	Non drive end	Drive end	Non drive end	Drive end	Non drive end	Drive end	Non drive end	Drive end	Non drive end	Drive end	Non drive end
	15.9	15.9	12.8	12.8	12.5	12.5	10.1	10.1	7.0	7.0	5.8	5.8	4.3	4.3

Bearing type	: 6307 ZZ	6204 ZZ	Foundation loads Max. traction Max. compression
Sealing	: V'Ring	V'Ring	
Lubrication interval	: -	-	
Lubricant amount	: -	-	
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.

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	26/10/2024		1 / 6	

# DATA SHEET

## Three Phase Induction Motor - Squirrel Cage



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

Notes  
USABLE @208V 3.07A SF 1.15 SFA 3.54A

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	26/10/2024		2 / 6	

# LOAD PERFORMANCE CURVE

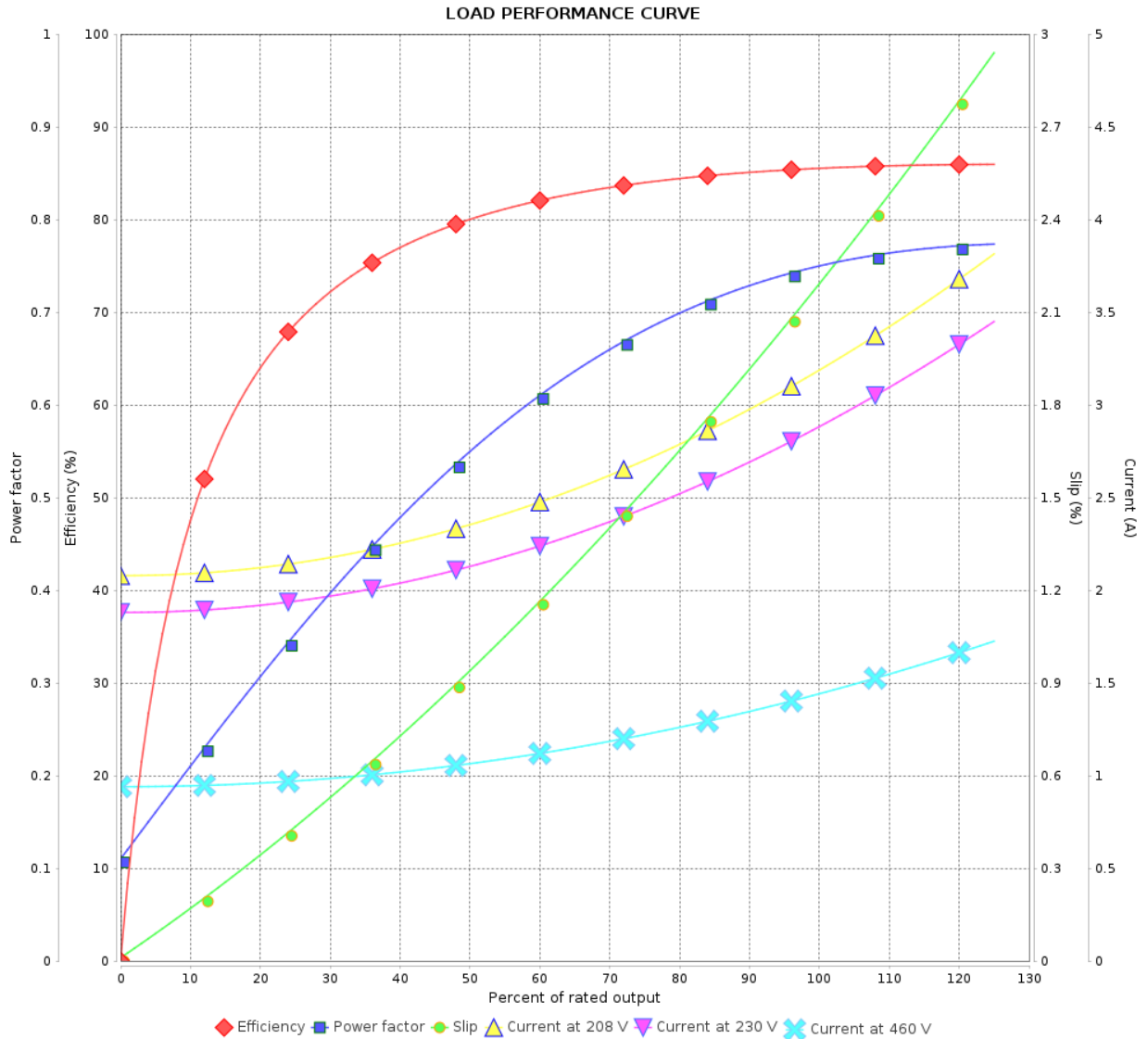
## Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 13017860



Performance : 230/460 V 60 Hz 4P

Rated current : 2.94/1.47 A  
 LRC : 8.6  
 Rated torque : 0.412 kgfm  
 Locked rotor torque : 290 %  
 Breakdown torque : 350 %  
 Rated speed : 1760 rpm

Moment of inertia (J) : 0.0049 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
Performed by		Page		Revision
Checked by		3 / 6		
Date		26/10/2024		

# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

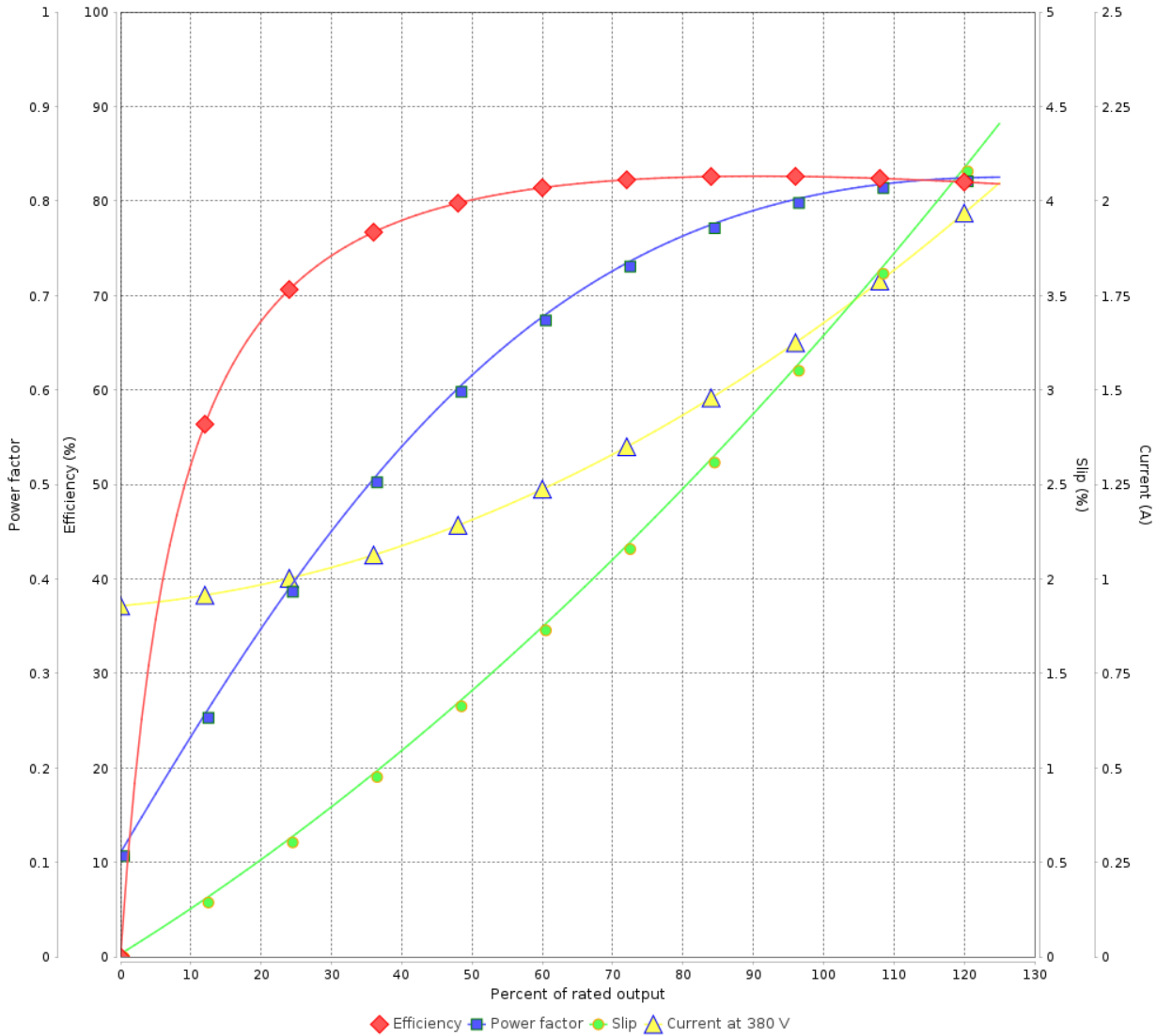


Customer :

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

Product code : 13017860

LOAD PERFORMANCE CURVE



Performance : 380 V 50 Hz 4P IE3

Rated current : 1.71 A  
LRC : 6.4  
Rated torque : 0.501 kgfm  
Locked rotor torque : 220 %  
Breakdown torque : 250 %  
Rated speed : 1450 rpm

Moment of inertia (J) : 0.0049 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
Performed by			Page 4 / 6	Revision
Checked by				
Date	26/10/2024			

# LOAD PERFORMANCE CURVE

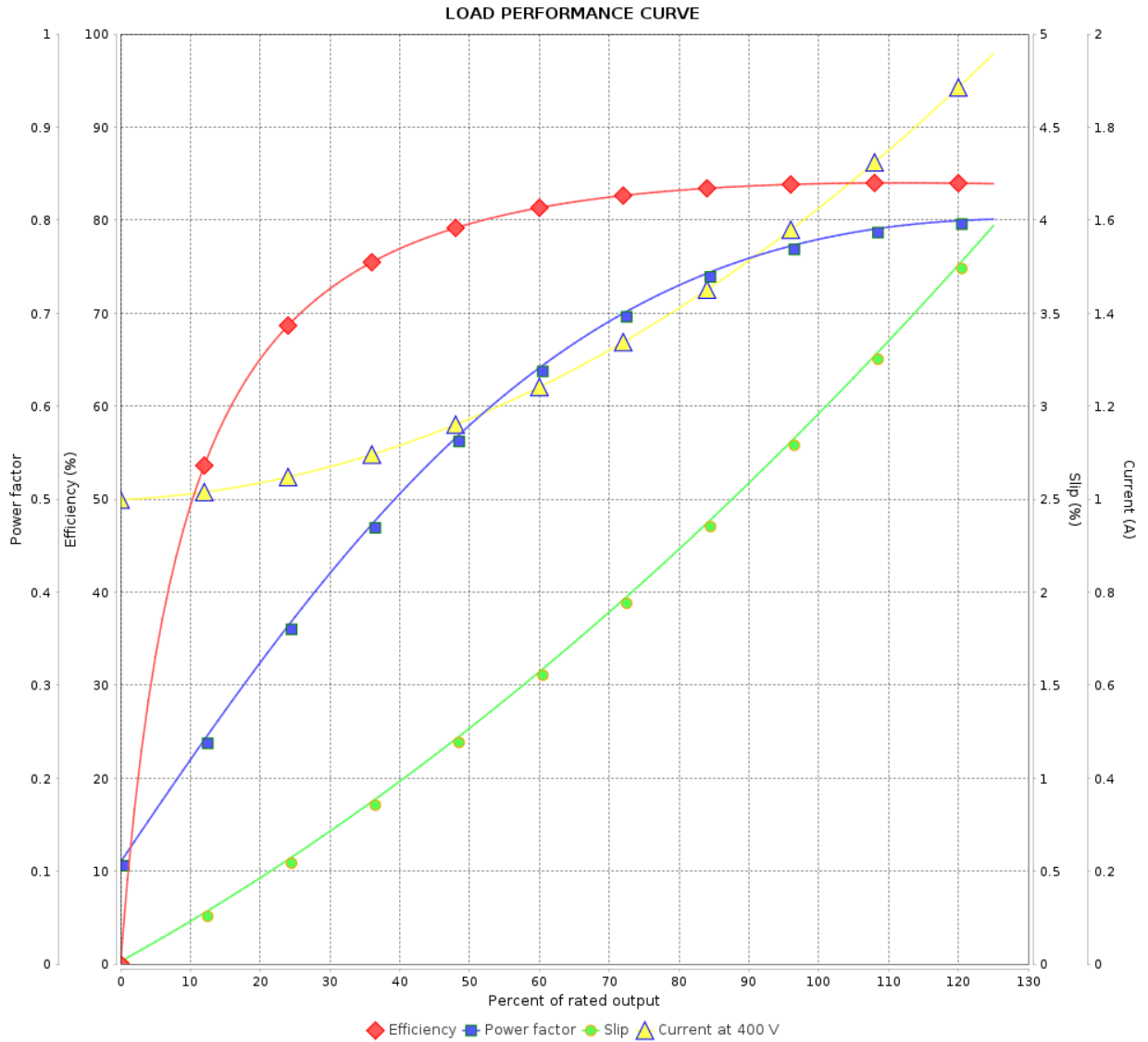
## Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 13017860



Performance : 400 V 50 Hz 4P IE3

Rated current : 1.65 A  
 LRC : 7.0  
 Rated torque : 0.499 kgfm  
 Locked rotor torque : 240 %  
 Breakdown torque : 290 %  
 Rated speed : 1455 rpm

Moment of inertia (J) : 0.0049 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
Performed by			Page	Revision
Checked by				
Date				

# LOAD PERFORMANCE CURVE

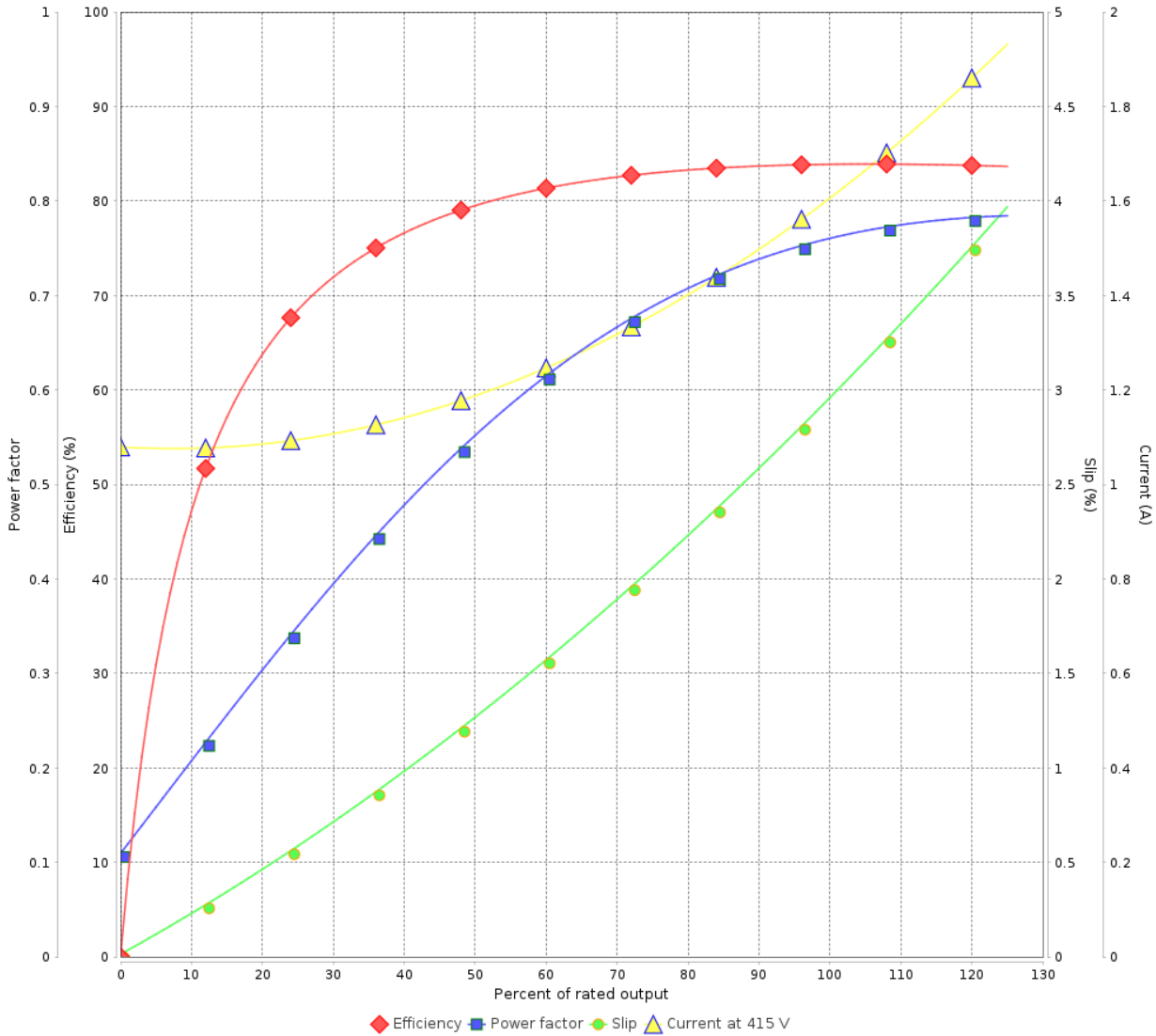
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 P Base NEMA Premium Efficiency Three-Phase      Product code : 13017860

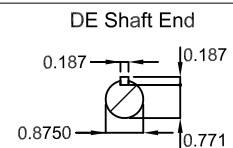
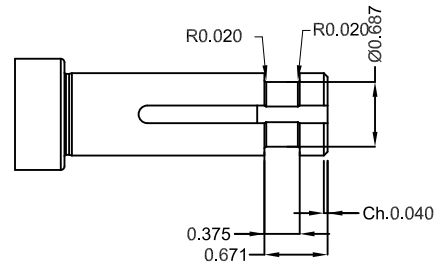
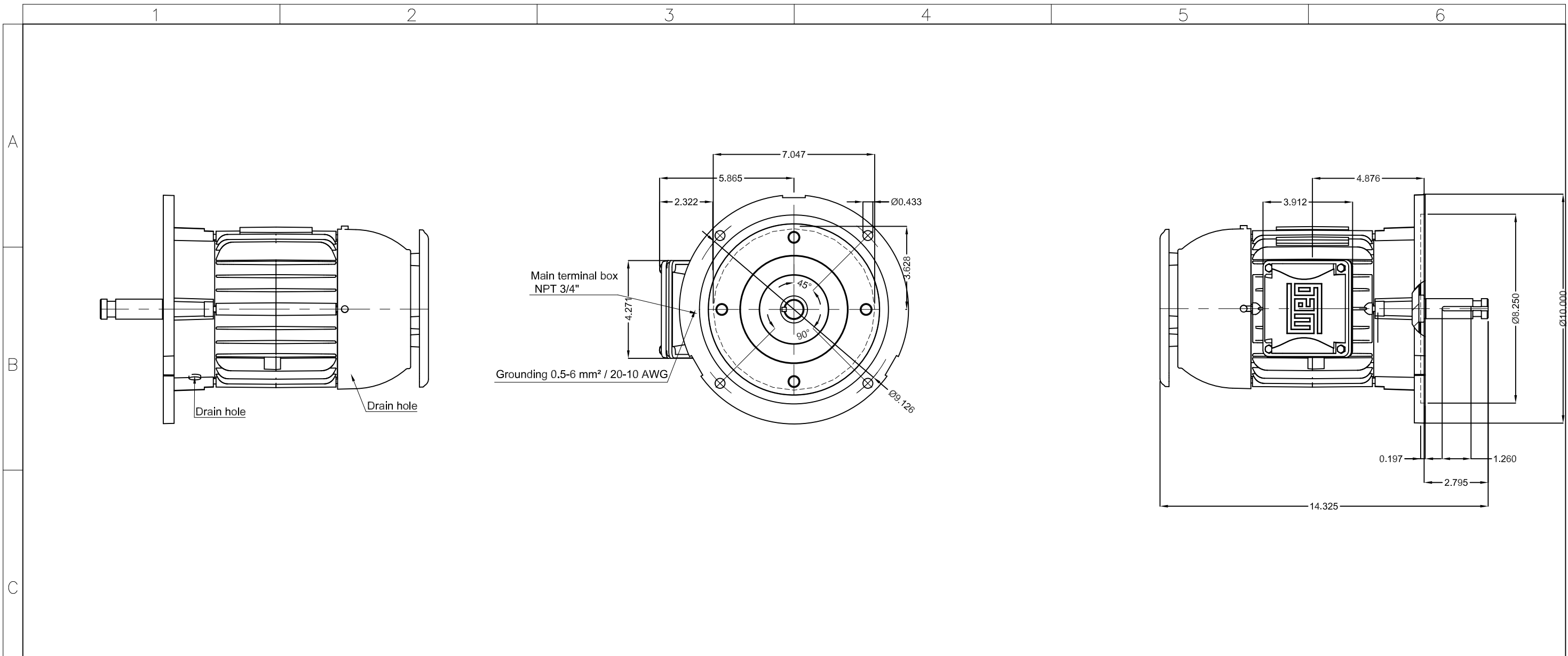
LOAD PERFORMANCE CURVE



Performance : 415 V 50 Hz 4P IE3

Rated current	: 1.63 A	Moment of inertia (J)	: 0.0049 kgm <sup>2</sup>
LRC	: 7.4	Duty cycle	: Cont.(S1)
Rated torque	: 0.499 kgfm	Insulation class	: F
Locked rotor torque	: 260 %	Service factor	: 1.25
Breakdown torque	: 310 %	Temperature rise	: 80 K
Rated speed	: 1455 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 6	Revision
Checked by				
Date	26/10/2024			



Color RAL 5009  
 Painting plan 207A  
 Mounting NEMA W-6  
 Mounting V1

1 HP 04 Poles 60 Hz

Dimensions in inches

ECM		LOC	SUMMARY OF MODIFICATIONS			HYBRISUSER	00
EXECUTED	HYBRISUSER		THREE PH. MOTOR W22 P. BASE NEMA PREM. EFF.	EXECUTED	CHECKED	RELEASED	DATE
CHECKED			FRAME 143HP IP55 TEFC				
RELEASED							
REL. DATE							

**PREVIEW**

WDD 00

SHEET /

