

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency Three-Phase Product code : 13334728

Frame	: 284/6T	Cooling method	: IC411 - TEFC
Insulation class	: F	Mounting	: F-1
Duty cycle	: Cont.(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 ²	: 189 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.2153 kgm ²
Design	: B		

Output [HP]	25	25	25	25
Poles	4	4	4	4
Frequency [Hz]	60	50	50	50
Rated voltage [V]	460	380	400	415
Rated current [A]	29.5	35.9	34.3	33.2
L. R. Amperes [A]	183	190	189	196
LRC [A]	6.2x(Code G)	5.3x(Code F)	5.5x(Code F)	5.9x(Code G)
No load current [A]	11.0	11.0	11.7	12.4
Rated speed [RPM]	1770	1455	1460	1465
Slip [%]	1.67	3.00	2.67	2.33
Rated torque [kgfm]	10.3	12.5	12.4	12.4
Locked rotor torque [%]	240	180	200	220
Breakdown torque [%]	270	210	240	260
Service factor	1.25	1.00	1.00	1.00
Temperature rise	80 K	105 K	105 K	105 K
Locked rotor time	43s (cold) 24s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)	25s (cold) 14s (hot)
Noise level ²	63.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)
Efficiency (%)	25%			
	50%	92.4	92.4	92.4
	75%	93.0	91.7	92.4
	100%	93.6	91.0	92.4
Power Factor	25%			
	50%	0.70	0.76	0.70
	75%	0.80	0.84	0.80
	100%	0.84	0.86	0.84

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

Losses (%)	P1 (0,9;1,0)	6.8	6.8	6.8	6.8
	P2 (0,5;1,0)	5.8	5.8	5.8	5.8
	P3 (0,25;1,0)	5.3	5.3	5.3	5.3
	P4 (0,9;0,5)	3.1	3.1	3.1	3.1
	P5 (0,5;0,5)	2.2	2.2	2.2	2.2
	P6 (0,5;0,25)	1.4	1.4	1.4	1.4
	P7 (0,25;0,25)	1.0	1.0	1.0	1.0

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads	
Bearing type	: 6311 C3	6211 C3	Max. traction	: 366 kgf
Sealing	: Taconite	Taconite	Max. compression	: 555 kgf
	Labyrinth	Labyrinth		
Lubrication interval	: 20000 h	20000 h		
Lubricant amount	: 18 g	11 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).

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	13/01/2024		1 / 6	

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer :

Notes

Rev.	Changes Summary		Performed	Checked	Date
Performed by			Page		Revision
Checked by					
Date	13/01/2024				

LOAD PERFORMANCE CURVE

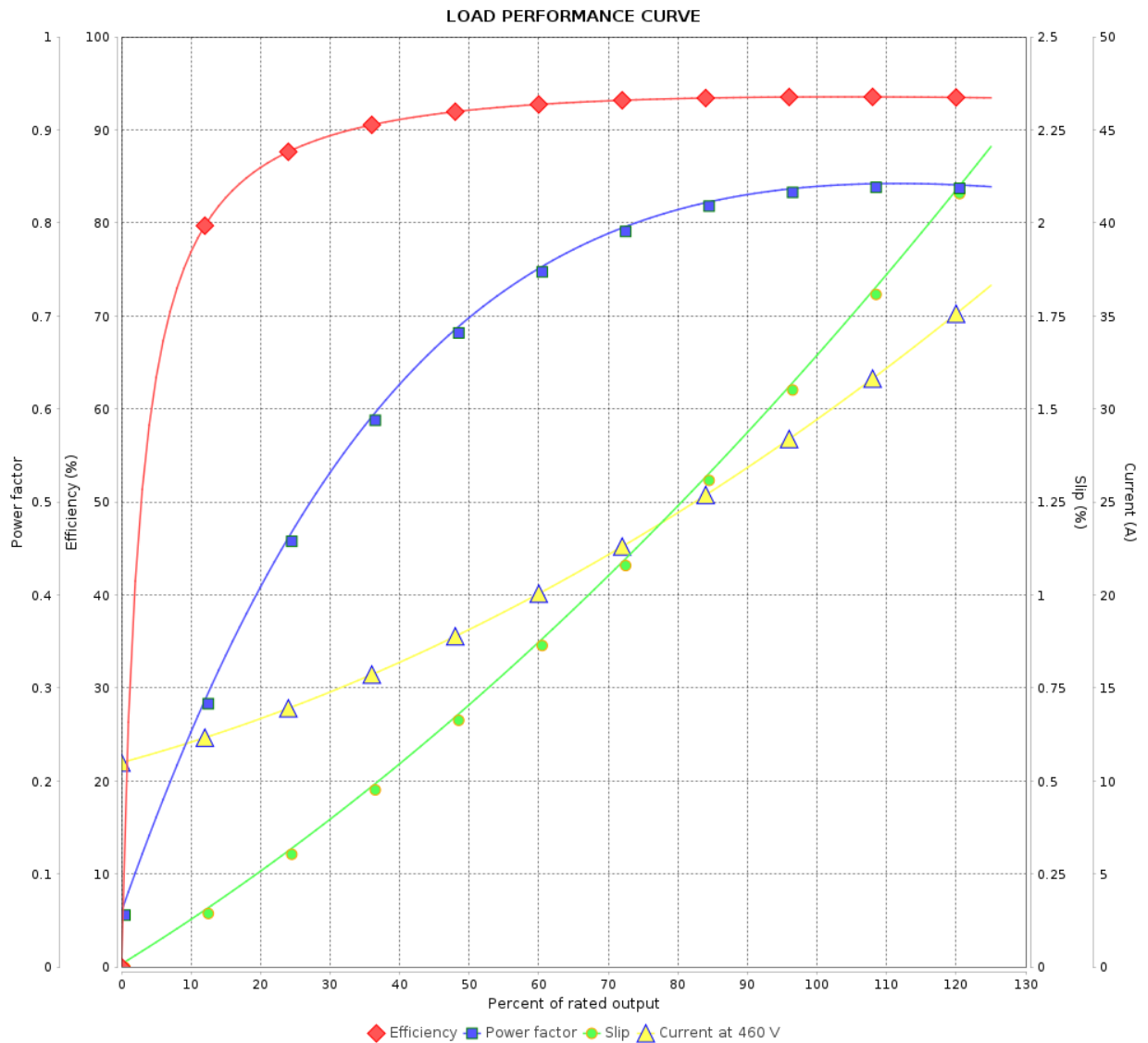
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency
Three-Phase

Product code : 13334728



Performance : 460 V 60 Hz 4P

Rated current	: 29.5 A	Moment of inertia (J)	: 0.2153 kgm ²
LRC	: 6.2	Duty cycle	: Cont.(S1)
Rated torque	: 10.3 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 270 %	Temperature rise	: 80 K
Rated speed	: 1770 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by				
Date	13/01/2024		Page 3 / 6	Revision

LOAD PERFORMANCE CURVE

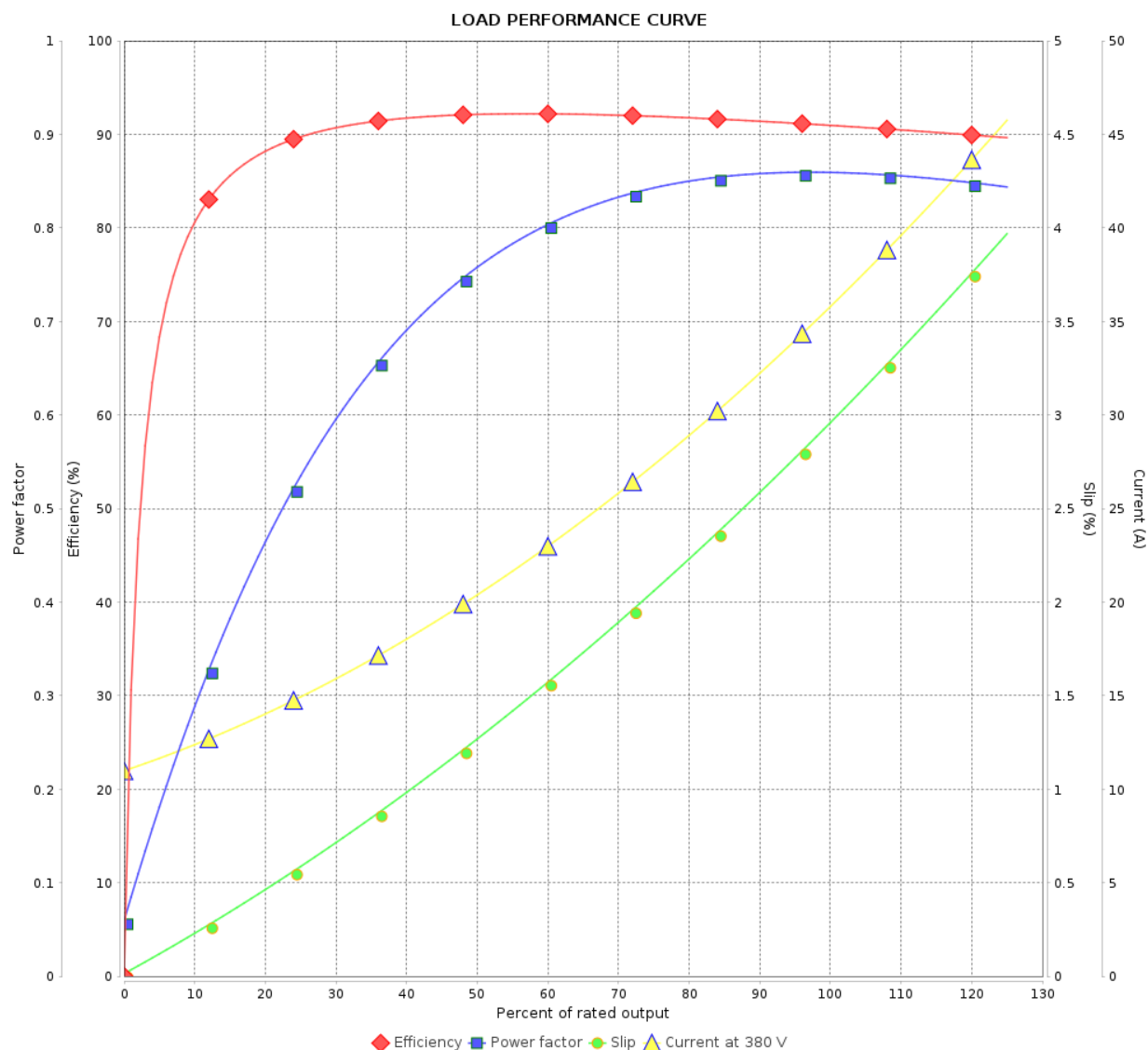
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency
Three-Phase

Product code : 13334728



Performance : 380 V 50 Hz 4P IE1

Rated current : 35.9 A
LRC : 5.3
Rated torque : 12.5 kgfm
Locked rotor torque : 180 %
Breakdown torque : 210 %
Rated speed : 1455 rpm

Moment of inertia (J) : 0.2153 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 4 / 6Revision		
Checked by				
Date	13/01/2024			

LOAD PERFORMANCE CURVE

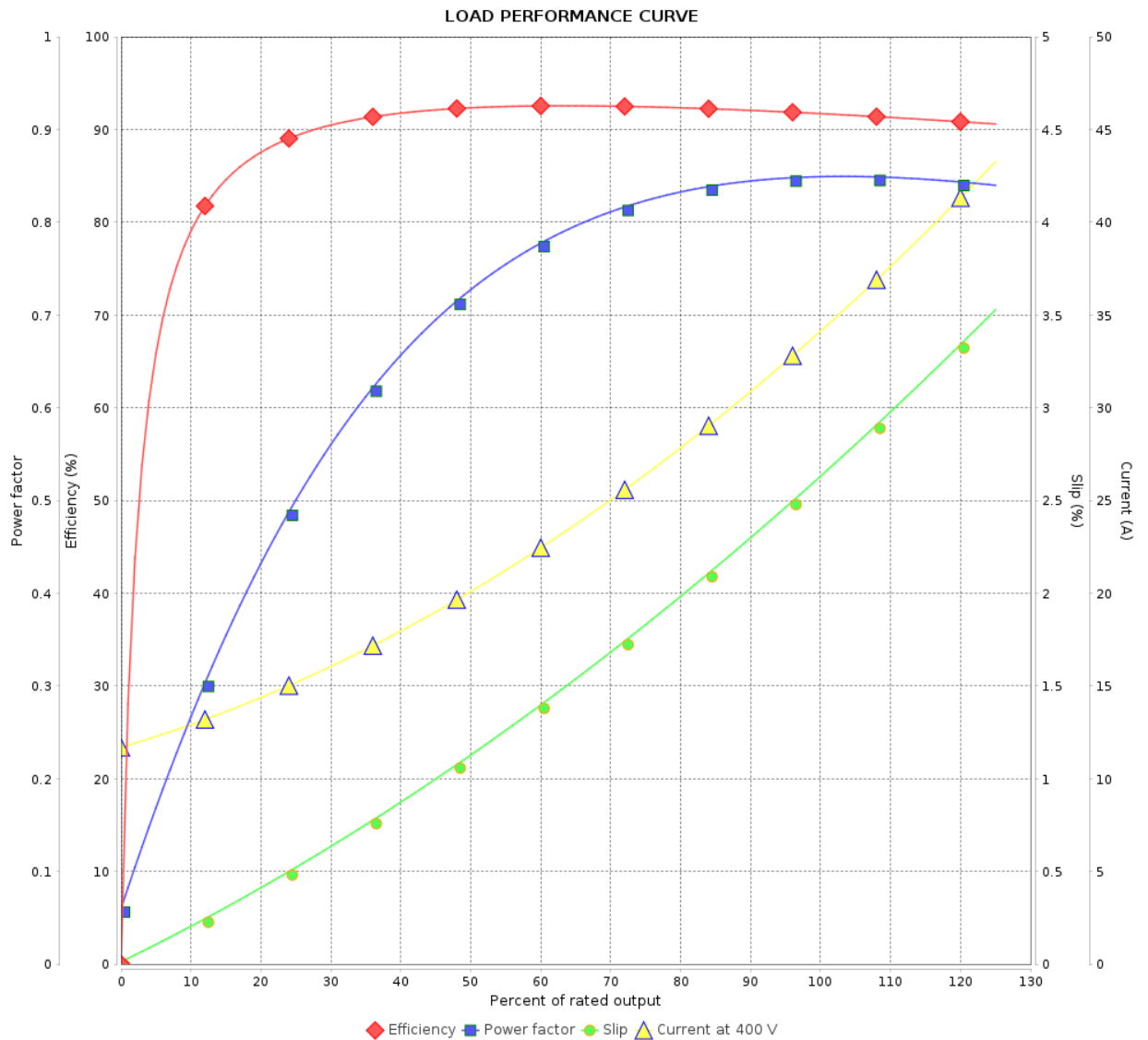
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency
Three-Phase

Product code : 13334728



Performance : 400 V 50 Hz 4P IE2

Rated current : 34.3 A
LRC : 5.5
Rated torque : 12.4 kgfm
Locked rotor torque : 200 %
Breakdown torque : 240 %
Rated speed : 1460 rpm

Moment of inertia (J) : 0.2153 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page 5 / 6Revision		
Checked by				
Date	13/01/2024			

LOAD PERFORMANCE CURVE

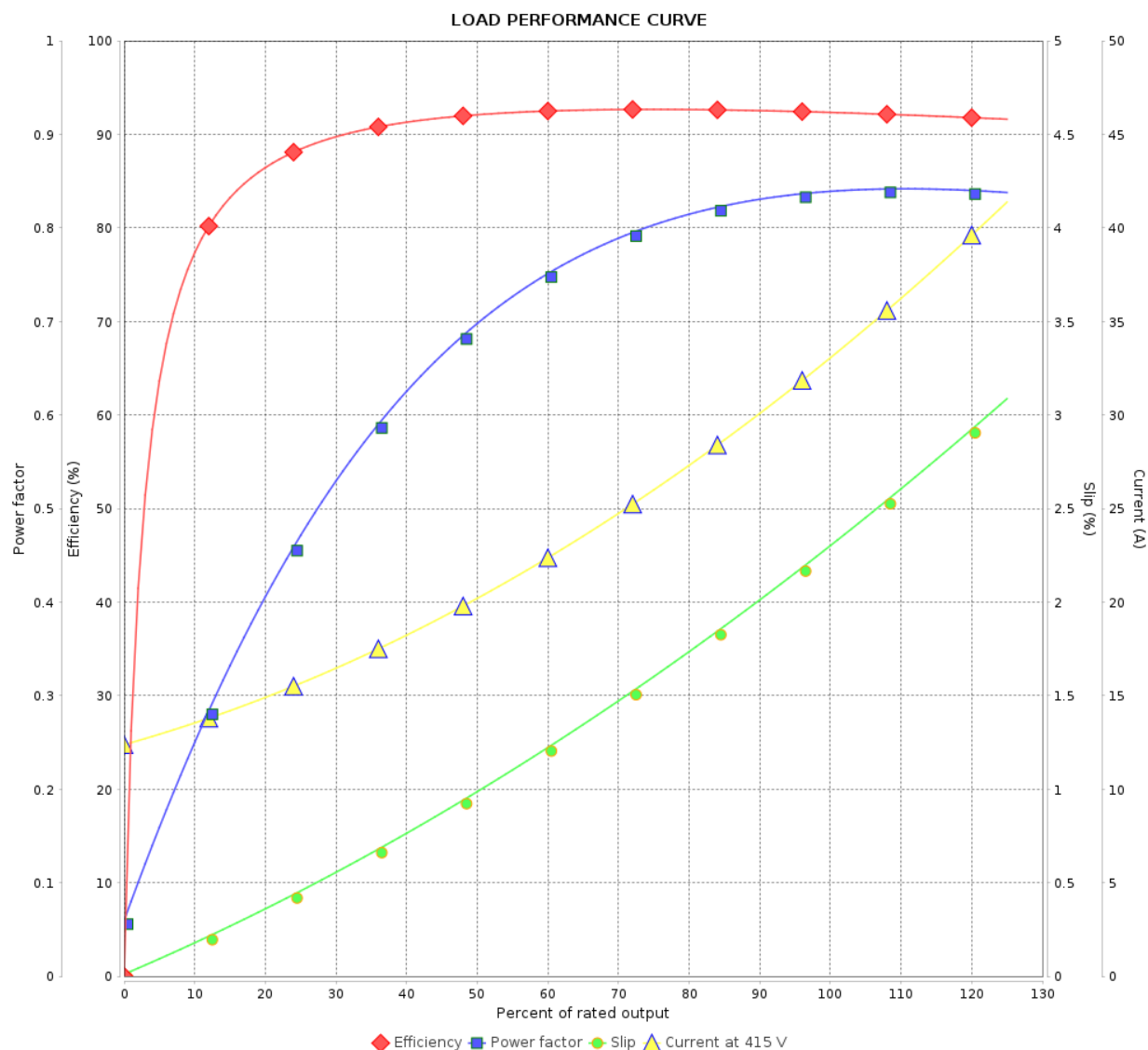
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 IEEE 841 NEMA Premium Efficiency
Three-Phase

Product code : 13334728

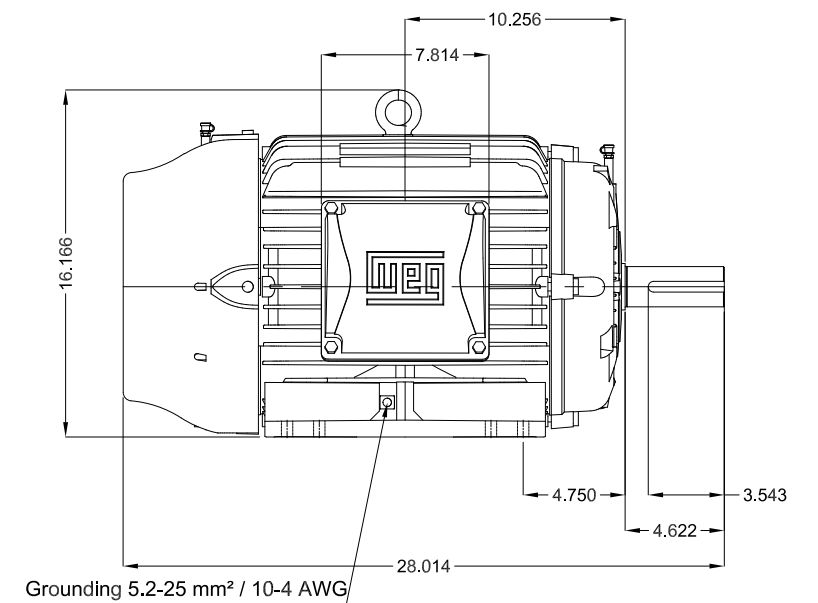




Performance : 415 V 50 Hz 4P IE2

Rated current : 33.2 A
LRC : 5.9
Rated torque : 12.4 kgfm
Locked rotor torque : 220 %
Breakdown torque : 260 %
Rated speed : 1465 rpm

Moment of inertia (J) : 0.2153 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.00
Temperature rise : 105 K
Design : B

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



25 HP 04 Poles 60 Hz										A
						HYBRISUSER				00
ECM		LOC	SUMMARY OF MODIFICATIONS			EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER		THREE PH. MOTOR IEEE 841 W22 NEMA PREM. EFF.				PREVIEW			
CHECKED			FRAME 284/6T IP55 TEFC							
RELEASED										
REL. DATE										
						SHEET		/		