

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 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 : 23.3 kg
Protection degree : IP55	Moment of inertia (J) : 0.0049 kgm ²
Design : B	

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 ²	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)	15.9	15.9	15.9	15.9
	P2 (0,5;1,0)	12.8	12.8	12.8	12.8
	P3 (0,25;1,0)	12.5	12.5	12.5	12.5
	P4 (0,9;0,5)	10.1	10.1	10.1	10.1
	P5 (0,5;0,5)	7.0	7.0	7.0	7.0
	P6 (0,5;0,25)	5.8	5.8	5.8	5.8
	P7 (0,25;0,25)	4.3	4.3	4.3	4.3

	<u>Drive end</u>	<u>Non drive end</u>	Foundation loads
Bearing type :	6307 ZZ	6204 ZZ	Max. traction
Sealing :	V'Ring	V'Ring	Max. compression
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.

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Performed by				
Checked by				
Date	26/10/2024			

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Revision

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Three Phase Induction Motor - Squirrel Cage



Customer :

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

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LOAD PERFORMANCE CURVE

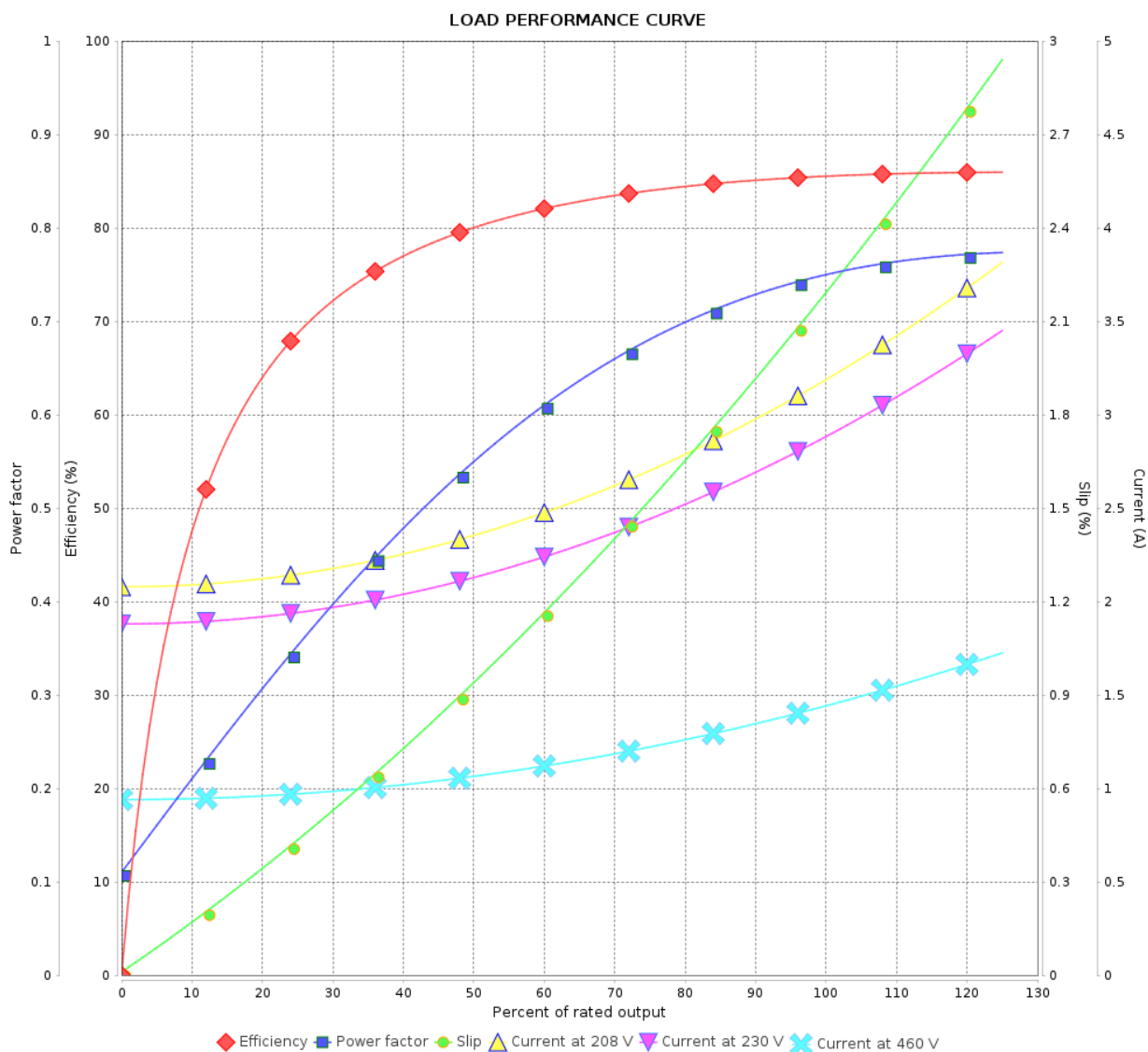
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 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 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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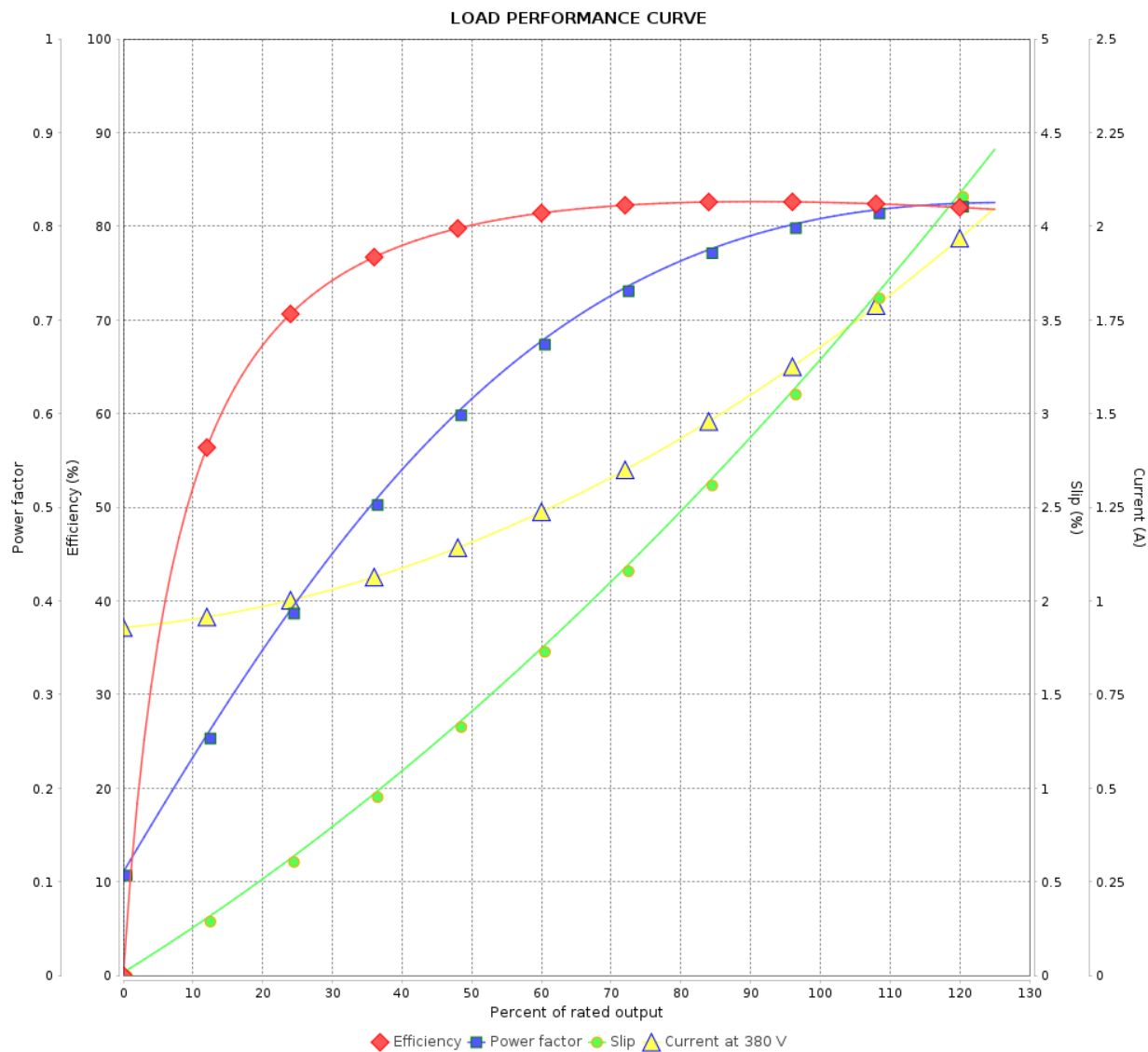
Three Phase Induction Motor - Squirrel Cage



Customer :

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

Product code : 13017860



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 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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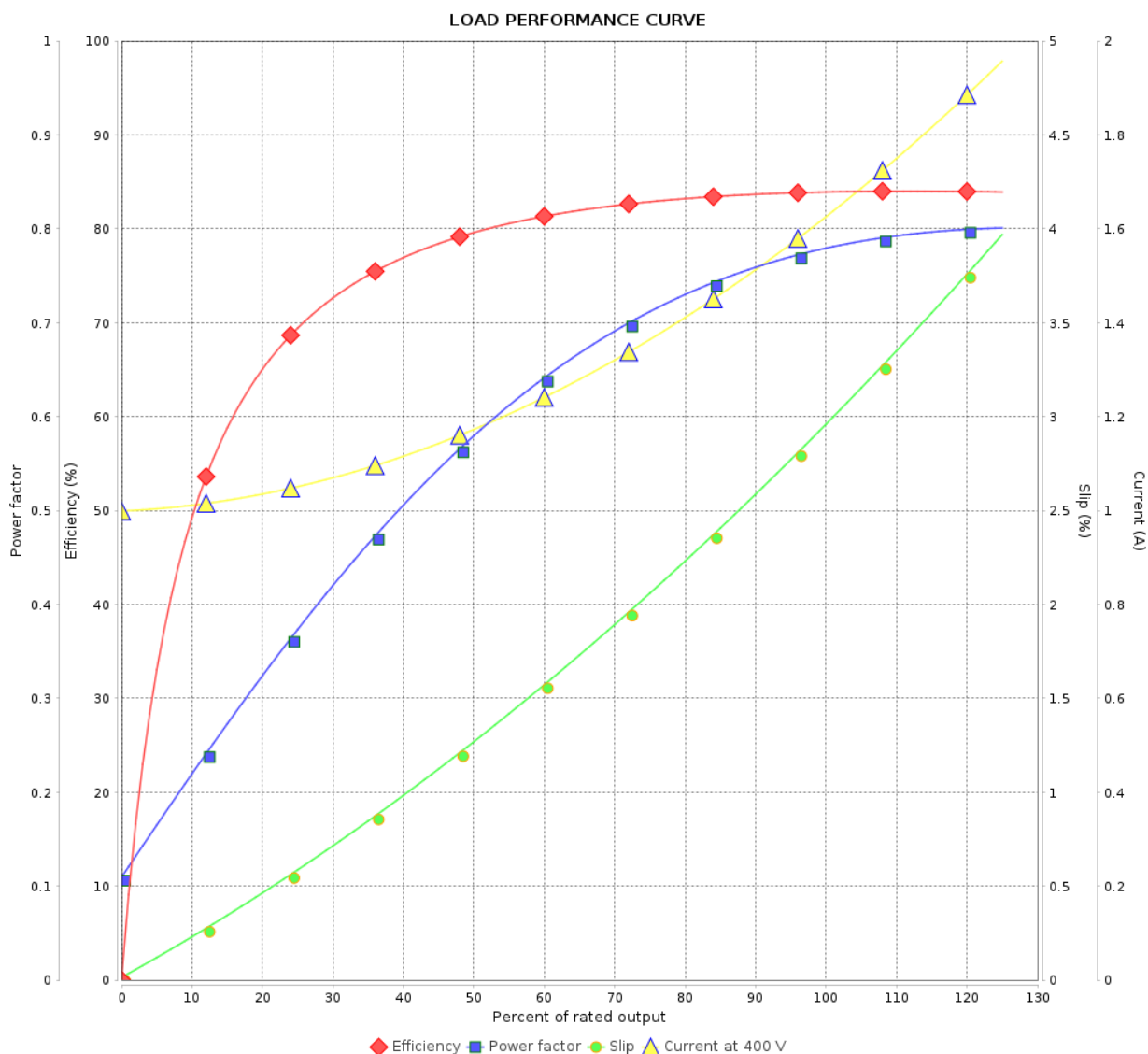
Three Phase Induction Motor - Squirrel Cage



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 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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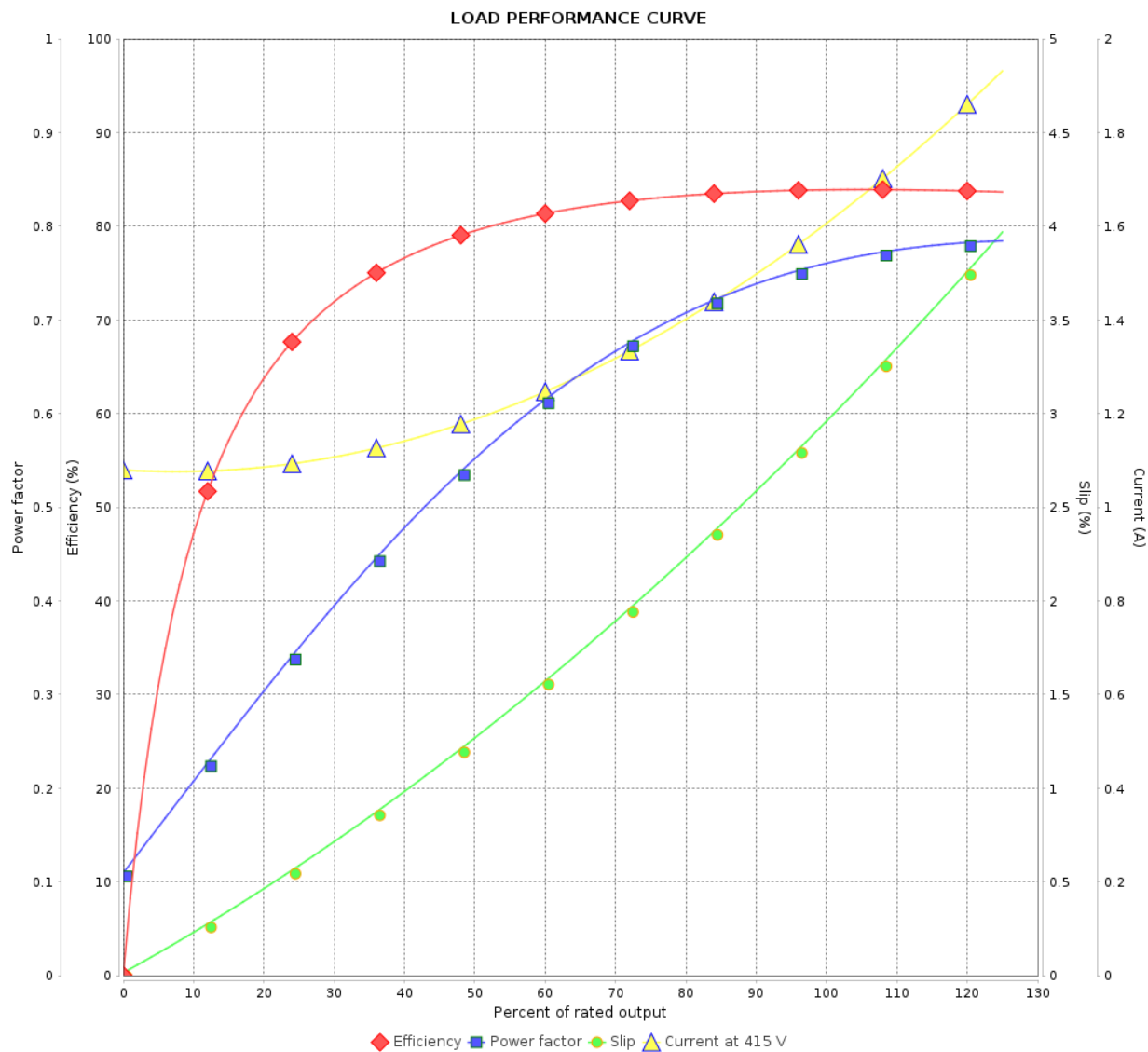
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Product line : W22 P Base NEMA Premium
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Product code : 13017860

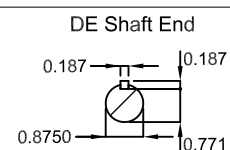
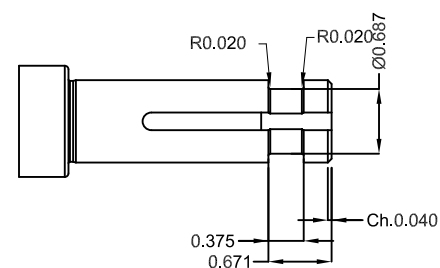
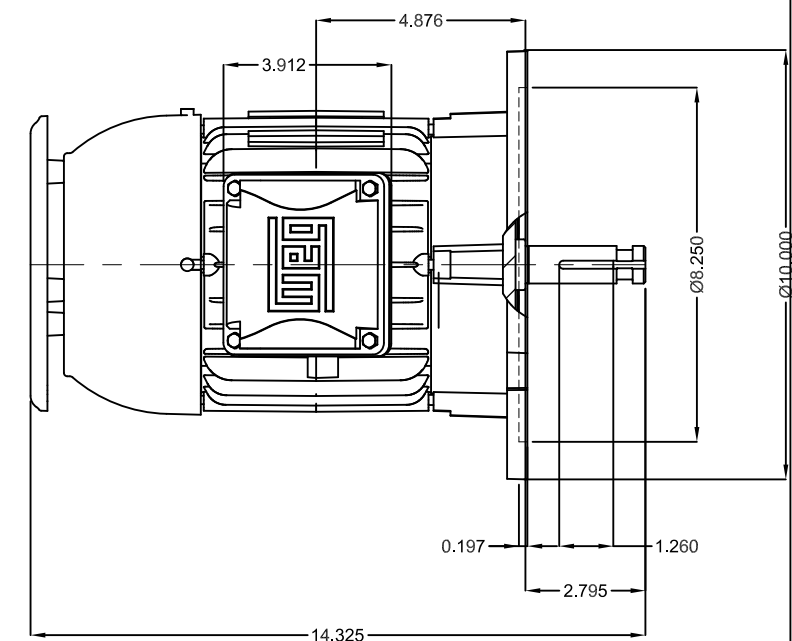
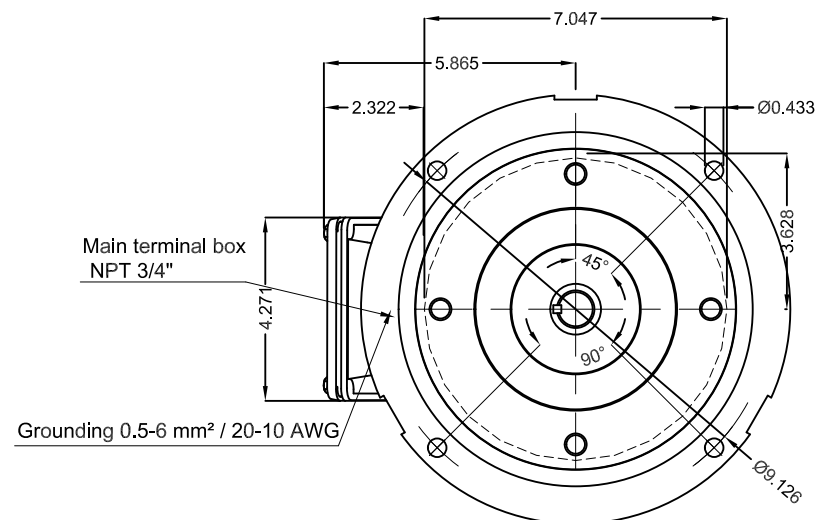
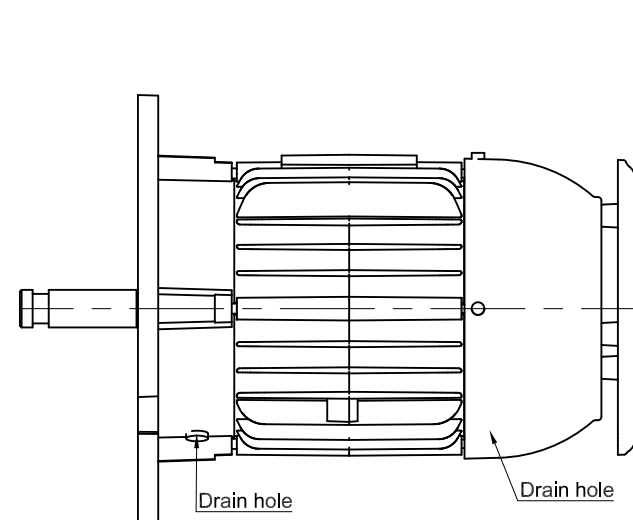


Performance : 415 V 50 Hz 4P IE3

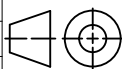
Rated current : 1.63 A
LRC : 7.4
Rated torque : 0.499 kgfm
Locked rotor torque : 260 %
Breakdown torque : 310 %
Rated speed : 1455 rpm

Moment of inertia (J) : 0.0049 kgm²
Duty cycle : Cont.(S1)
Insulation class : F
Service factor : 1.25
Temperature rise : 80 K
Design : B

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	26/10/2024				



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

1 HP 04 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. FRAME 143HP IP55 TEFC				PREVIEW WDD 00			
CHECKED										
RELEASED										
REL. DATE										
						SHEET		/		