

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :							
Product line	: ODP NEMA Premium Efficiency Three-Phase	Product code :	11997391				
Frame	: 324TC	Cooling method	: IC01 - ODP				
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 ³	: 218 kg				
Protection degree	: IP23	Moment of inertia (J)	: 0.2551 kgm ²				
Design	: B						
Output [HP]	40	30	30	30	40	40	40
Poles	4	4	4	4	4	4	4
Frequency [Hz]	60	50	50	50	50	50	50
Rated voltage [V]	230/460	380	400	415	380	400	415
Rated current [A]	96.4/48.2	42.8	41.6	41.1	58.1	55.8	54.4
L. R. Amperes [A]	598/299	270	291	312	279	301	321
LRC [A]	6.2x(Code G)	6.3x(Code G)	7.0x(Code H)	7.6x(Code J)	4.8x(Code E)	5.4x(Code F)	5.9x(Code G)
No load current [A]	37.0/18.5	15.4	16.8	18.1	15.4	16.8	18.1
Rated speed [RPM]	1775	1475	1475	1480	1465	1470	1475
Slip [%]	1.39	1.67	1.67	1.33	2.33	2.00	1.67
Rated torque [kgfm]	16.4	14.8	14.8	14.7	19.8	19.7	19.7
Locked rotor torque [%]	220	240	270	290	180	200	220
Breakdown torque [%]	229	340	370	400	250	280	300
Service factor	1.15	1.15	1.15	1.15	1.15	1.15	1.15
Temperature rise	80 K	80 K	80 K	80 K	80 K	80 K	80 K
Locked rotor time	50s (cold) 28s (hot)	36s (cold) 20s (hot)	32s (cold) 18s (hot)	30s (cold) 17s (hot)	36s (cold) 20s (hot)	32s (cold) 18s (hot)	30s (cold) 17s (hot)
Noise level ²	64.0 dB(A)						
Efficiency (%)	25%						
	50%	93.6	90.1	89.9	89.8	91.7	91.7
	75%	94.1	91.7	91.7	92.0	91.7	91.7
	100%	94.1	93.0	93.0	93.0	92.3	92.3
Power Factor	25%						
	50%	0.68	0.70	0.66	0.63	0.77	0.74
	75%	0.78	0.80	0.77	0.74	0.84	0.82
	100%	0.83	0.84	0.82	0.80	0.85	0.84
Bearing type	: Drive end : 6312 Z C3	Non drive end : 6212 Z C3	Foundation loads				
Sealing	: Without	Without	Max. traction : 634 kgf				
	Bearing Seal Bearing Seal		Max. compression : 852 kgf				
Lubrication interval	: 20000 h	20000 h					
Lubricant amount	: 21 g	13 g					
Lubricant type	: Mobil Polyrex EM						
Notes USABLE @208V 107A SF 1.15 SFA 123A							
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. (4) At 100% of full load.				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	01/04/2025					1 / 8	

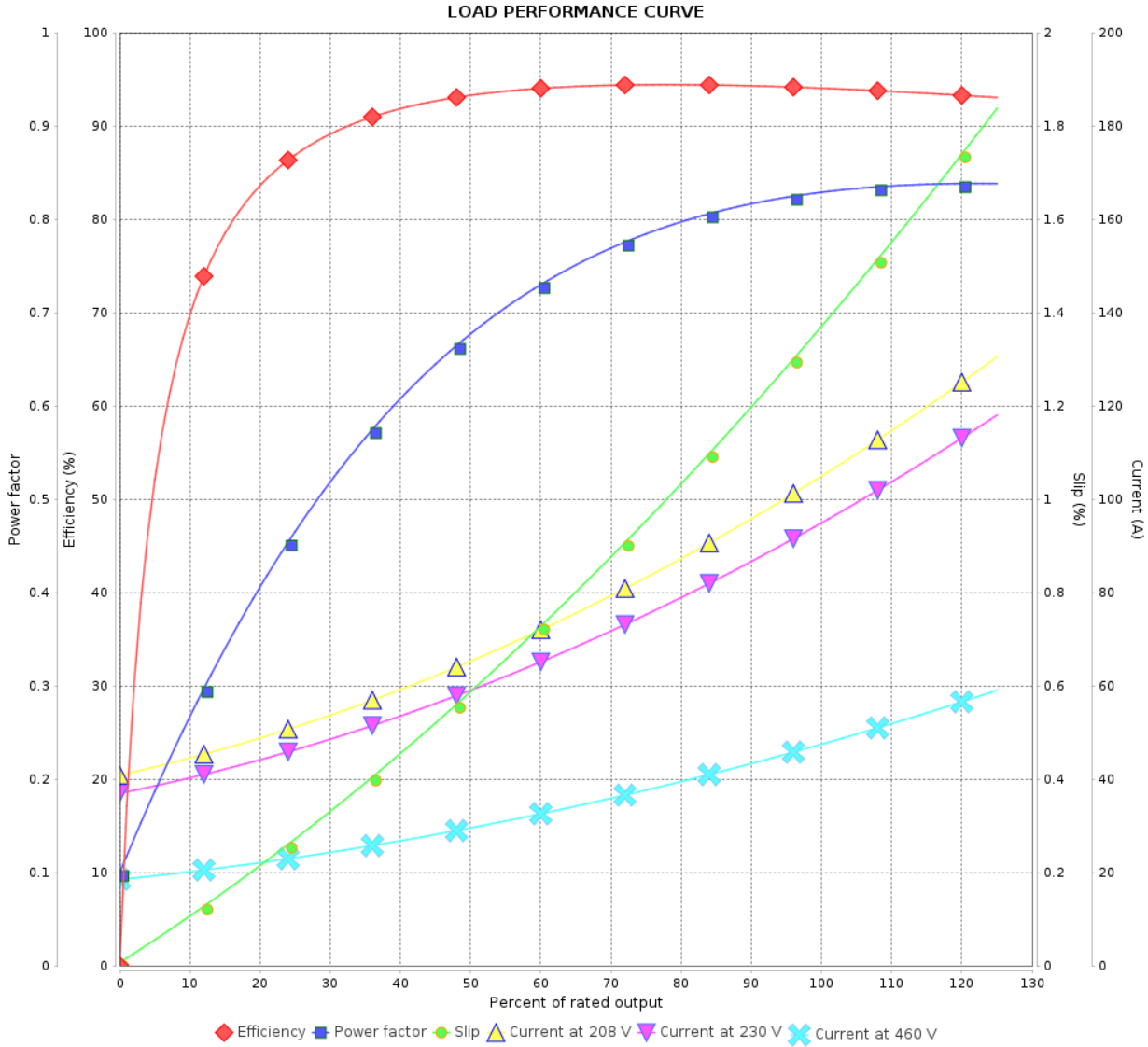
LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase Product code : 11997391



Performance : 230/460 V 60 Hz 4P

Rated current : 96.4/48.2 A
 LRC : 6.2
 Rated torque : 16.4 kgfm
 Locked rotor torque : 220 %
 Breakdown torque : 229 %
 Rated speed : 1775 rpm

Moment of inertia (J) : 0.2551 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.15
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 2 / 8	Revision
Checked by				
Date	01/04/2025			

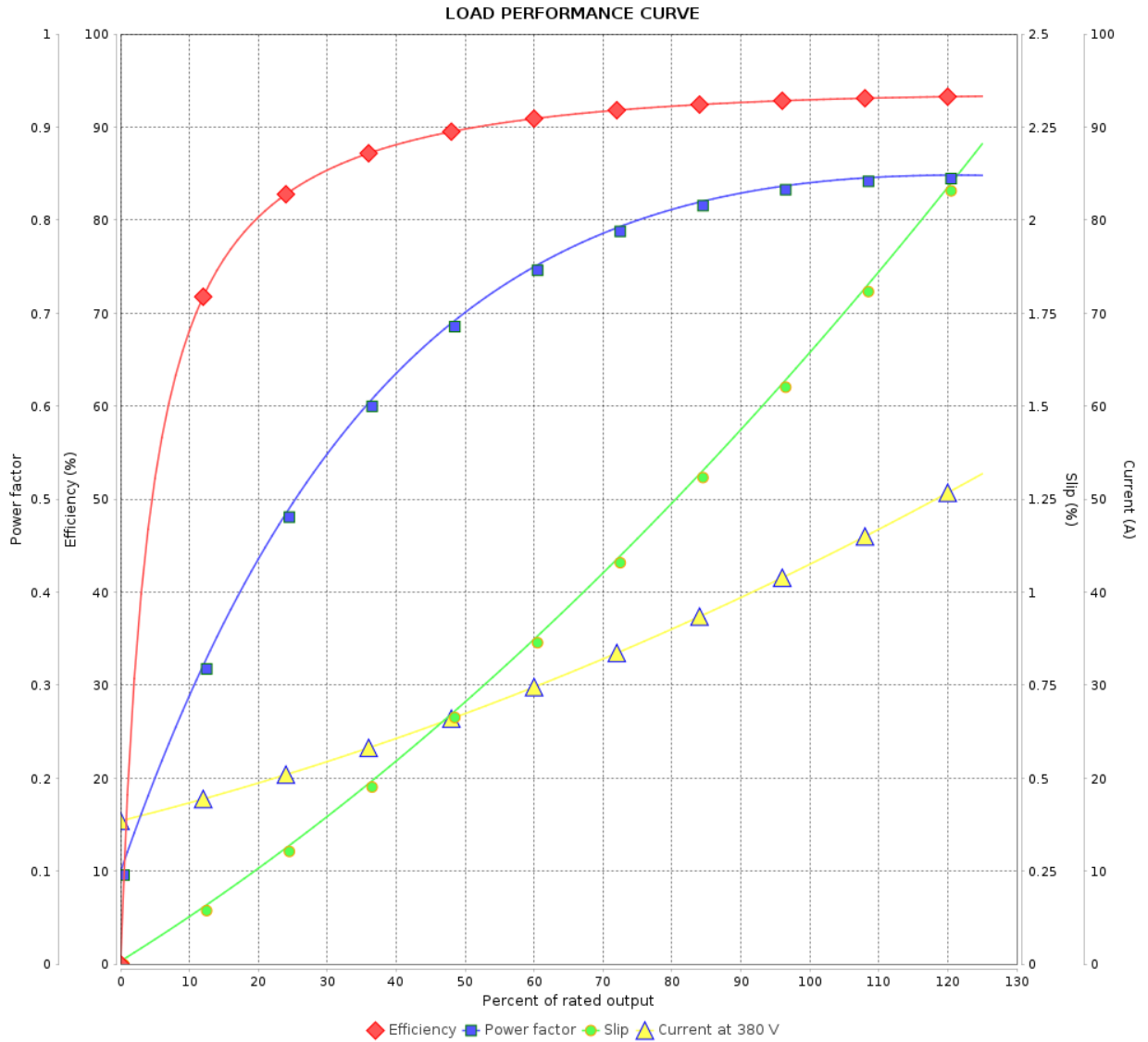
LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase Product code : 11997391



Performance : 380 V 50 Hz 4P IE3

Rated current	: 42.8 A	Moment of inertia (J)	: 0.2551 kgm ²
LRC	: 6.3	Duty cycle	: Cont.(S1)
Rated torque	: 14.8 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.15
Breakdown torque	: 340 %	Temperature rise	: 80 K
Rated speed	: 1475 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page	Revision
Checked by				
Date				
			3 / 8	

LOAD PERFORMANCE CURVE

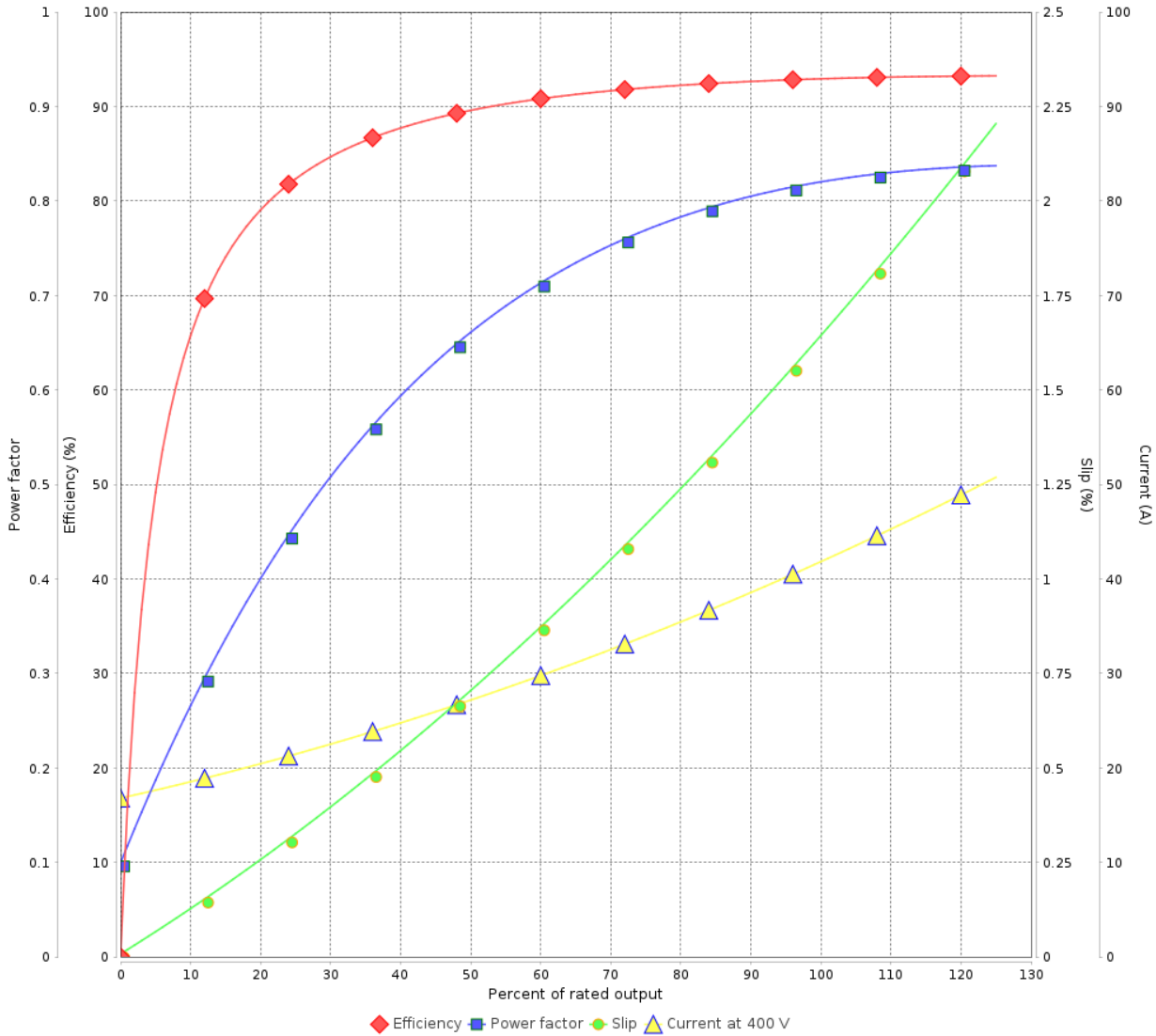
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase Product code : 11997391

LOAD PERFORMANCE CURVE



Performance : 400 V 50 Hz 4P IE3

Rated current	: 41.6 A	Moment of inertia (J)	: 0.2551 kgm ²
LRC	: 7.0	Duty cycle	: Cont.(S1)
Rated torque	: 14.8 kgfm	Insulation class	: F
Locked rotor torque	: 270 %	Service factor	: 1.15
Breakdown torque	: 370 %	Temperature rise	: 80 K
Rated speed	: 1475 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 8	Revision
Checked by				
Date	01/04/2025			

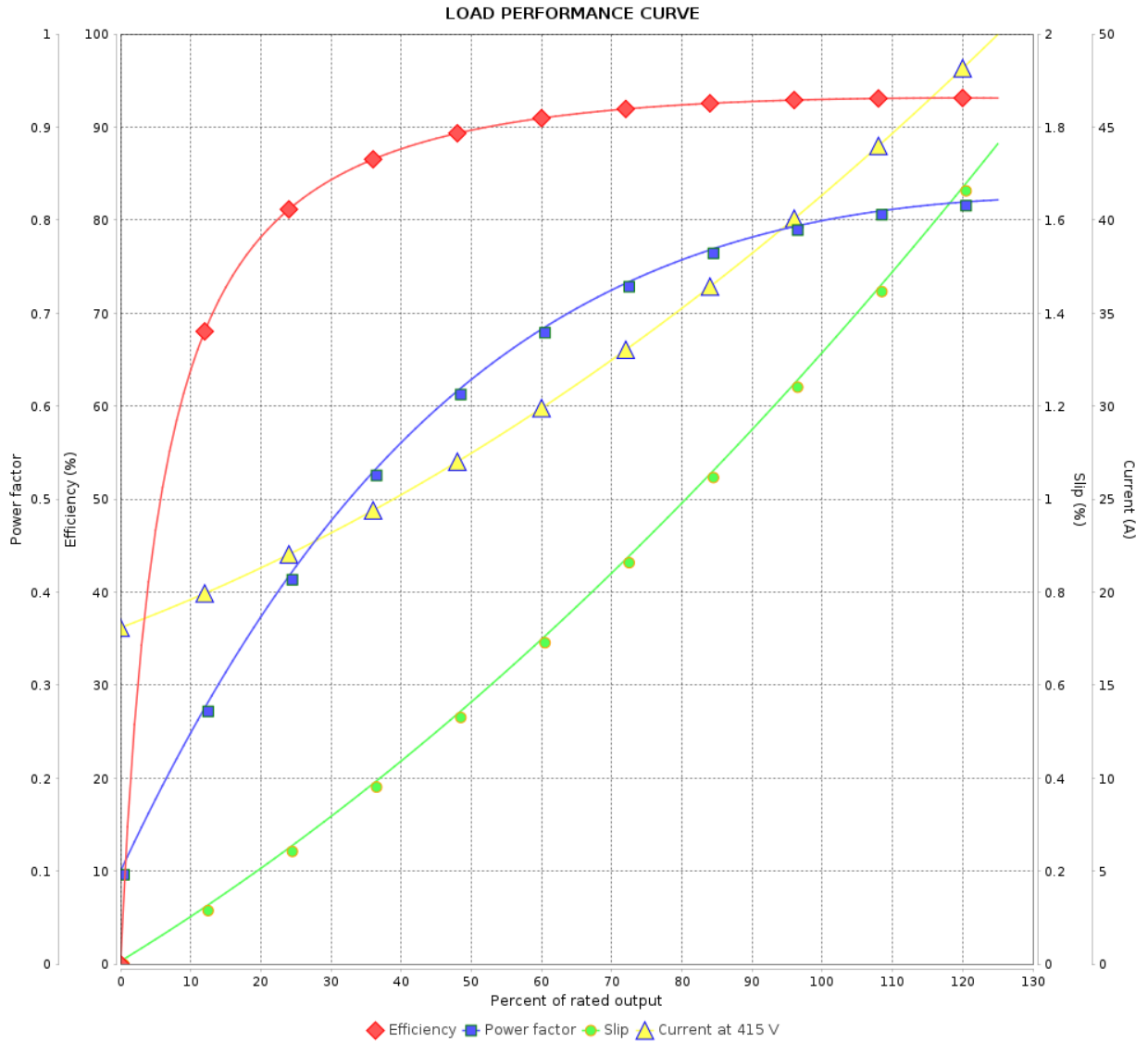
LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase Product code : 11997391



Performance : 415 V 50 Hz 4P IE3

Rated current	: 41.1 A	Moment of inertia (J)	: 0.2551 kgm ²
LRC	: 7.6	Duty cycle	: Cont.(S1)
Rated torque	: 14.7 kgfm	Insulation class	: F
Locked rotor torque	: 290 %	Service factor	: 1.15
Breakdown torque	: 400 %	Temperature rise	: 80 K
Rated speed	: 1480 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 5 / 8	Revision
Checked by				
Date	01/04/2025			

LOAD PERFORMANCE CURVE

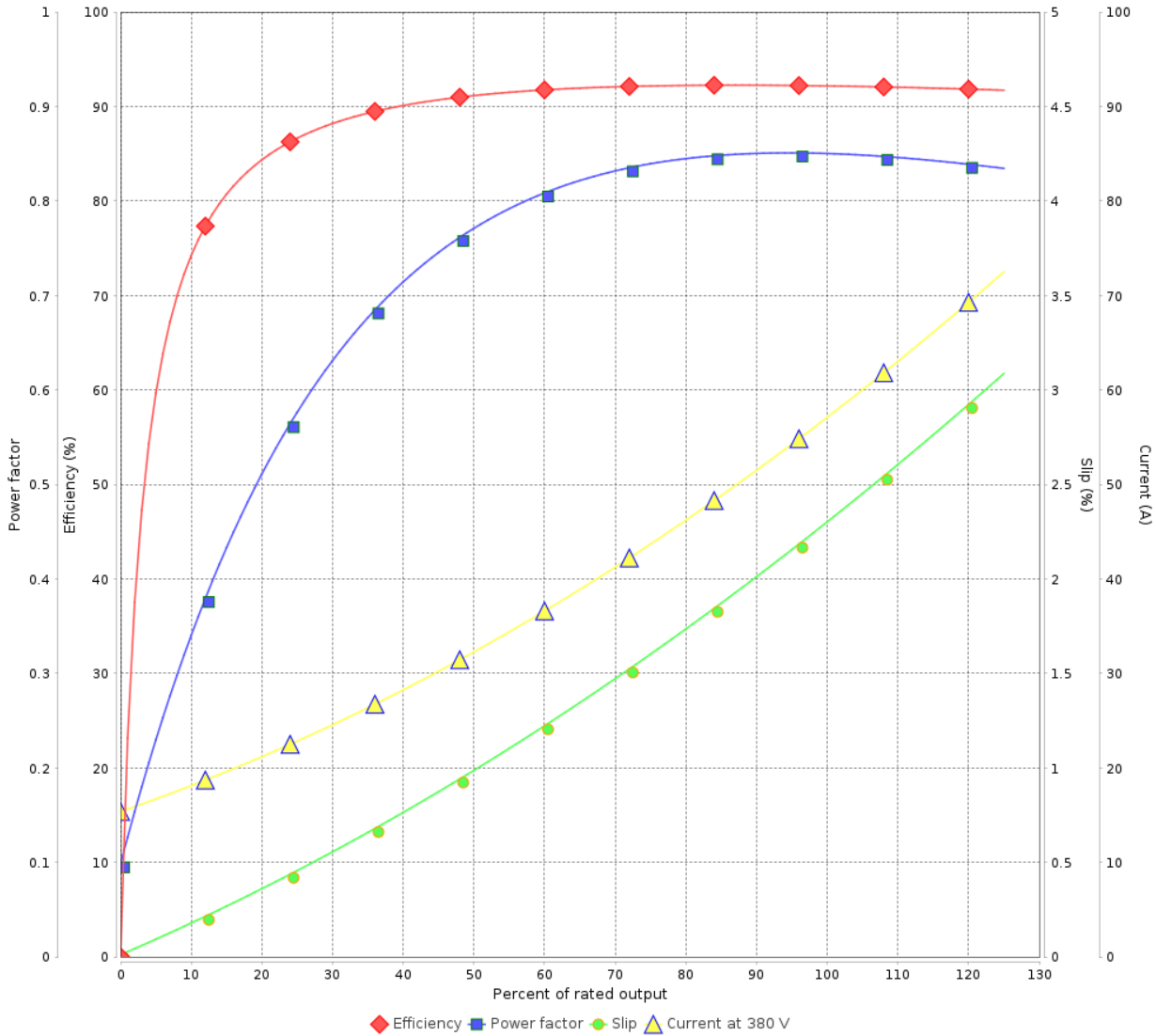
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase Product code : 11997391

LOAD PERFORMANCE CURVE



Performance : 380 V 50 Hz 4P IE2

Rated current	: 58.1 A	Moment of inertia (J)	: 0.2551 kgm ²
LRC	: 4.8	Duty cycle	: Cont.(S1)
Rated torque	: 19.8 kgfm	Insulation class	: F
Locked rotor torque	: 180 %	Service factor	: 1.15
Breakdown torque	: 250 %	Temperature rise	: 80 K
Rated speed	: 1465 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 6 / 8	Revision
Checked by				
Date	01/04/2025			

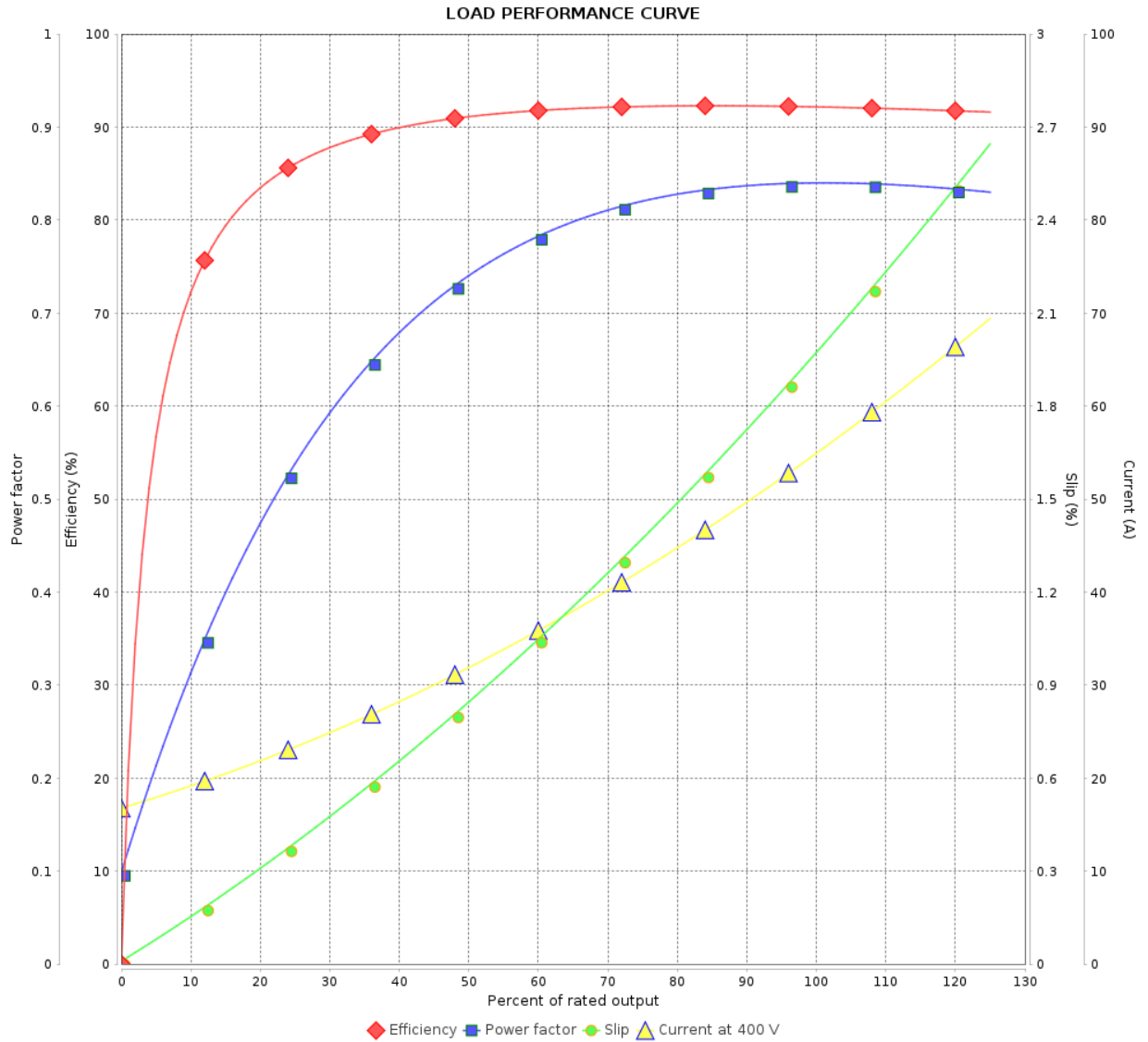
LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase Product code : 11997391



Performance : 400 V 50 Hz 4P IE2

Rated current	: 55.8 A	Moment of inertia (J)	: 0.2551 kgm ²
LRC	: 5.4	Duty cycle	: Cont.(S1)
Rated torque	: 19.7 kgfm	Insulation class	: F
Locked rotor torque	: 200 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 1470 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 7 / 8	Revision
Checked by				
Date	01/04/2025			

LOAD PERFORMANCE CURVE

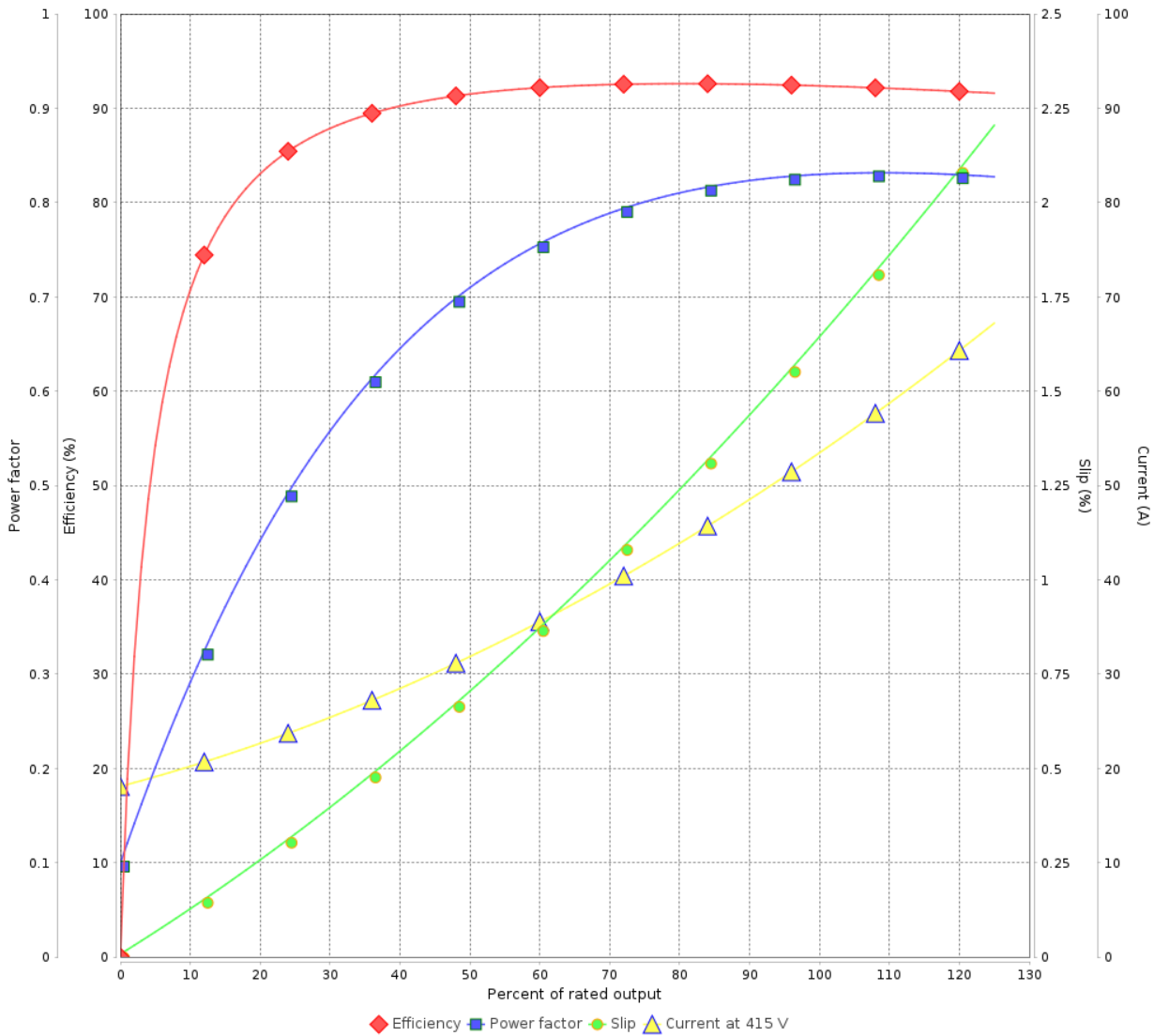
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : ODP NEMA Premium Efficiency Three-Phase Product code : 11997391

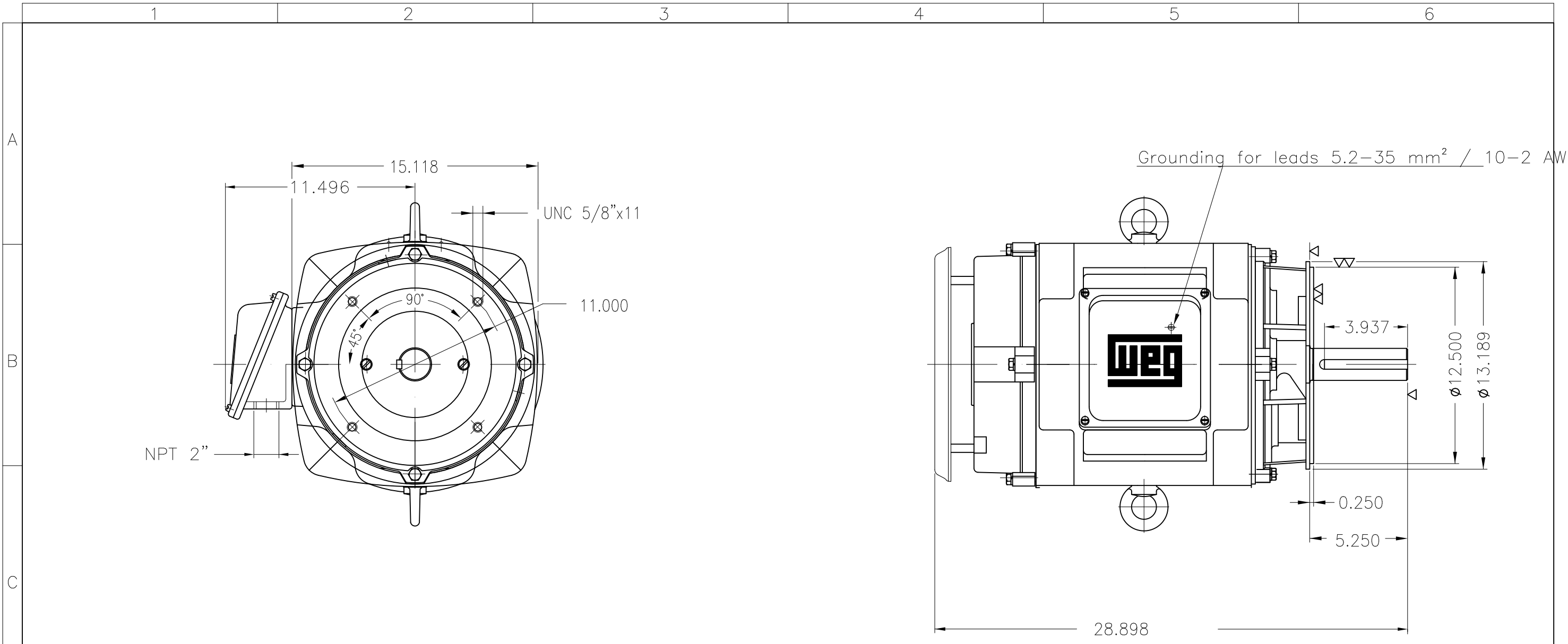
LOAD PERFORMANCE CURVE



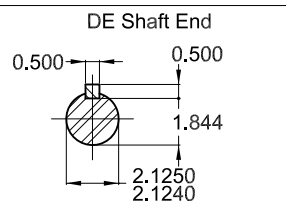
Performance : 415 V 50 Hz 4P IE2

Rated current	: 54.4 A	Moment of inertia (J)	: 0.2551 kgm ²
LRC	: 5.9	Duty cycle	: Cont.(S1)
Rated torque	: 19.7 kgfm	Insulation class	: F
Locked rotor torque	: 220 %	Service factor	: 1.15
Breakdown torque	: 300 %	Temperature rise	: 80 K
Rated speed	: 1475 rpm	Design	: B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 8 / 8	Revision
Checked by				
Date	01/04/2025			



Color RAL 5009
 Painting plan 203A
 Mounting B14R(D)



40 HP 04 Poles 60 Hz										A	
HYBRISUSER										00	
ECM	LOC	SUMMARY OF MODIFICATIONS					EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	HYBRISUSER	THREE PH. MOTOR GENERAL NEMA PREM. EFF.					EXECUTED				
CHECKED		FRAME 324TC IP23 ODP					EXECUTED				
RELEASED							EXECUTED				
REL. DATE		WMO	Jaragua do Sul	Product Engineering			PREVIEW	WDD	00	1 / 1	

