DATA SHEET

Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 Close Coupled Pump JP NEMA Premium Efficiency Three-Phase

Product code : 12353067

Frame	: 254/6JP	Cooling method	: IC411 - TEFC
Insulation class	: F	Mounting	: F-1
Duty cycle	: Cont.(S1)	Rotation¹	: Both (CW and CCW)
Ambient temperature	: -20°C to +40°C	Starting method	: Direct On Line
Altitude	: 1000 m.a.s.l.	Approx. weight³	: 152 kg
Protection degree	: IP55	Moment of inertia (J)	: 0.1305 kgm²
Design	: B		

Output [HP]		20	15	15	15	20	20	20
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]		48.2/24.1	21.8	21.2	20.6	29.4	28.0	27.1
L. R. Amperes [A]		333/166	161	167	173	168	174	179
LRC [A]		6.9x(Code G)	7.4x(Code H)	7.9x(Code J)	8.4x(Code K)	5.7x(Code F)	6.2x(Code G)	6.6x(Code H)
No load current [A]		19.2/9.60	9.90	10.5	11.0	9.90	10.5	11.0
Rated speed [RPM]		1770	1473	1475	1477	1455	1460	1465
Slip [%]		1.67	1.80	1.67	1.53	3.00	2.67	2.33
Rated torque [kgfm]		8.20	7.39	7.38	7.37	9.98	9.94	9.91
Locked rotor torque [%]		240	250	280	300	190	210	229
Breakdown torque [%]		260	290	320	340	210	229	260
Service factor		1.25	1.00	1.00	1.00	1.00	1.00	1.00
Temperature rise		80 K	80 K	80 K	80 K	105 K	105 K	105 K
Locked rotor time		54s (cold) 30s (hot)	59s (cold) 33s (hot)	55s (cold) 31s (hot)	52s (cold) 29s (hot)	39s (cold) 22s (hot)	37s (cold) 21s (hot)	36s (cold) 20s (hot)
Noise level²		64.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)	61.0 dB(A)
Efficiency (%)	25%							
	50%	91.7	91.0	89.8	89.8	91.7	91.0	91.0
	75%	92.4	91.5	91.0	91.3	91.0	91.0	91.7
	100%	93.0	91.4	91.4	91.7	90.2	91.0	91.7
Power Factor	25%							
	50%	0.68	0.65	0.62	0.60	0.75	0.72	0.70
	75%	0.79	0.78	0.75	0.73	0.83	0.81	0.80
	100%	0.84	0.84	0.82	0.81	0.86	0.85	0.84

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

Losses (%)	P1 (0,9;1,0)	7.5	7.5	7.5	7.5	7.5	7.5	7.5
	P2 (0,5;1,0)	6.4	6.4	6.4	6.4	6.4	6.4	6.4
	P3 (0,25;1,0)	5.8	5.8	5.8	5.8	5.8	5.8	5.8
	P4 (0,9;0,5)	3.6	3.6	3.6	3.6	3.6	3.6	3.6
	P5 (0,5;0,5)	2.5	2.5	2.5	2.5	2.5	2.5	2.5
	P6 (0,5;0,25)	1.6	1.6	1.6	1.6	1.6	1.6	1.6
	P7 (0,25;0,25)	1.1	1.1	1.1	1.1	1.1	1.1	1.1

		Drive end	Non drive end
Bearing type	:	6309 C3	6209 C3
Sealing	:	V'Ring	V'Ring
Lubrication interval	:	20000 h	20000 h
Lubricant amount	:	13 g	9 g
Lubricant type	:	Mobil Polyrex EM	

Foundation loads

Max. traction : 329 kgf

Max. compression : 481 kgf

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DATA SHEET

Three Phase Induction Motor - Squirrel Cage

Customer :

Notes
USABLE @208V 53.3A SF 1.15 SFA 61.3A

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.

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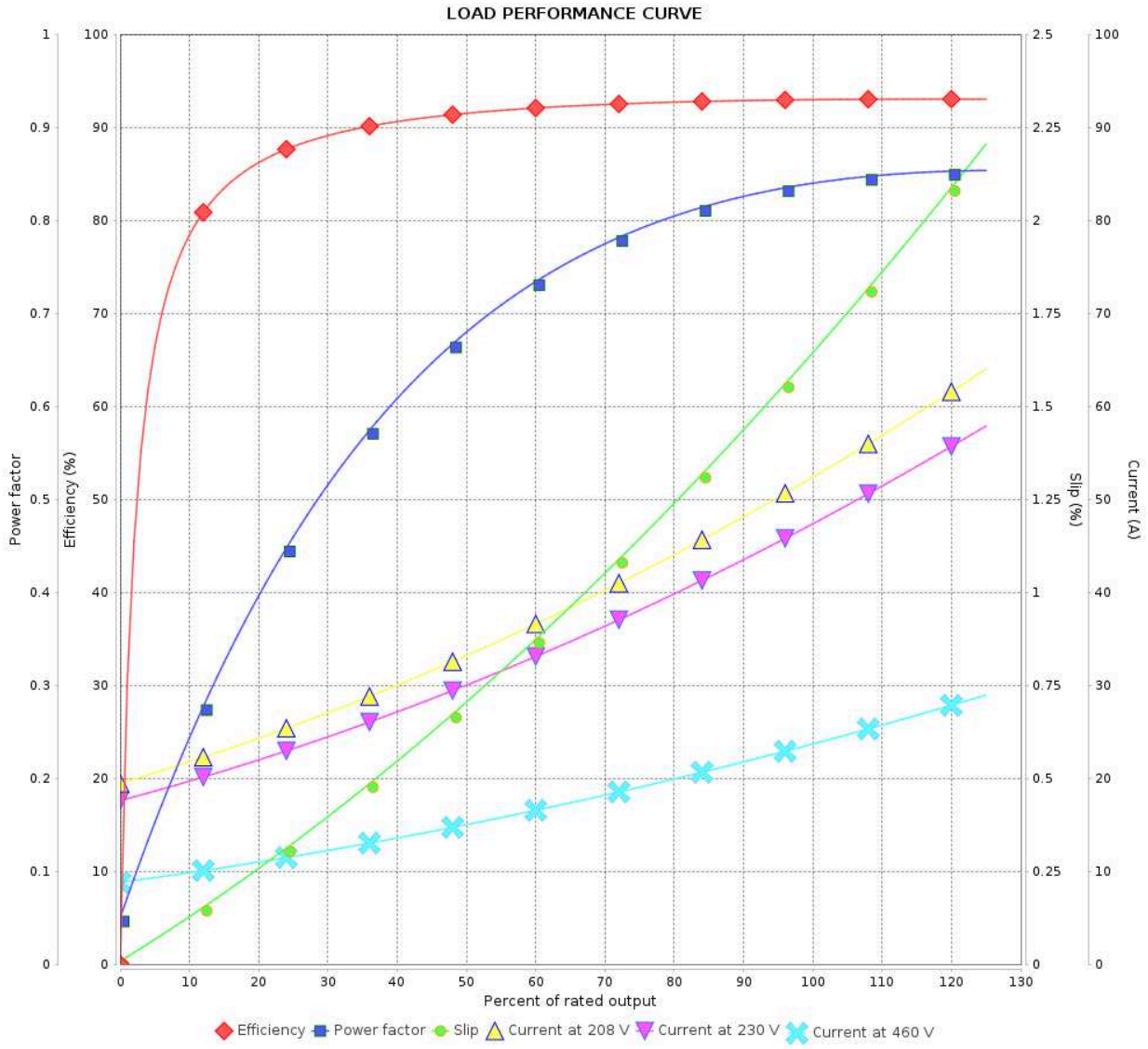
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LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

Customer :

Product line	: W22 Close Coupled Pump JP NEMA Premium Efficiency Three-Phase	Product code :	12353067



Performance	: 230/460 V 60 Hz 4P		
Rated current	: 48.2/24.1 A	Moment of inertia (J)	: 0.1305 kgm²
LRC	: 6.9	Duty cycle	: Cont.(S1)
Rated torque	: 8.20 kgfm	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.25
Breakdown torque	: 260 %	Temperature rise	: 80 K
Rated speed	: 1770 rpm	Design	: B

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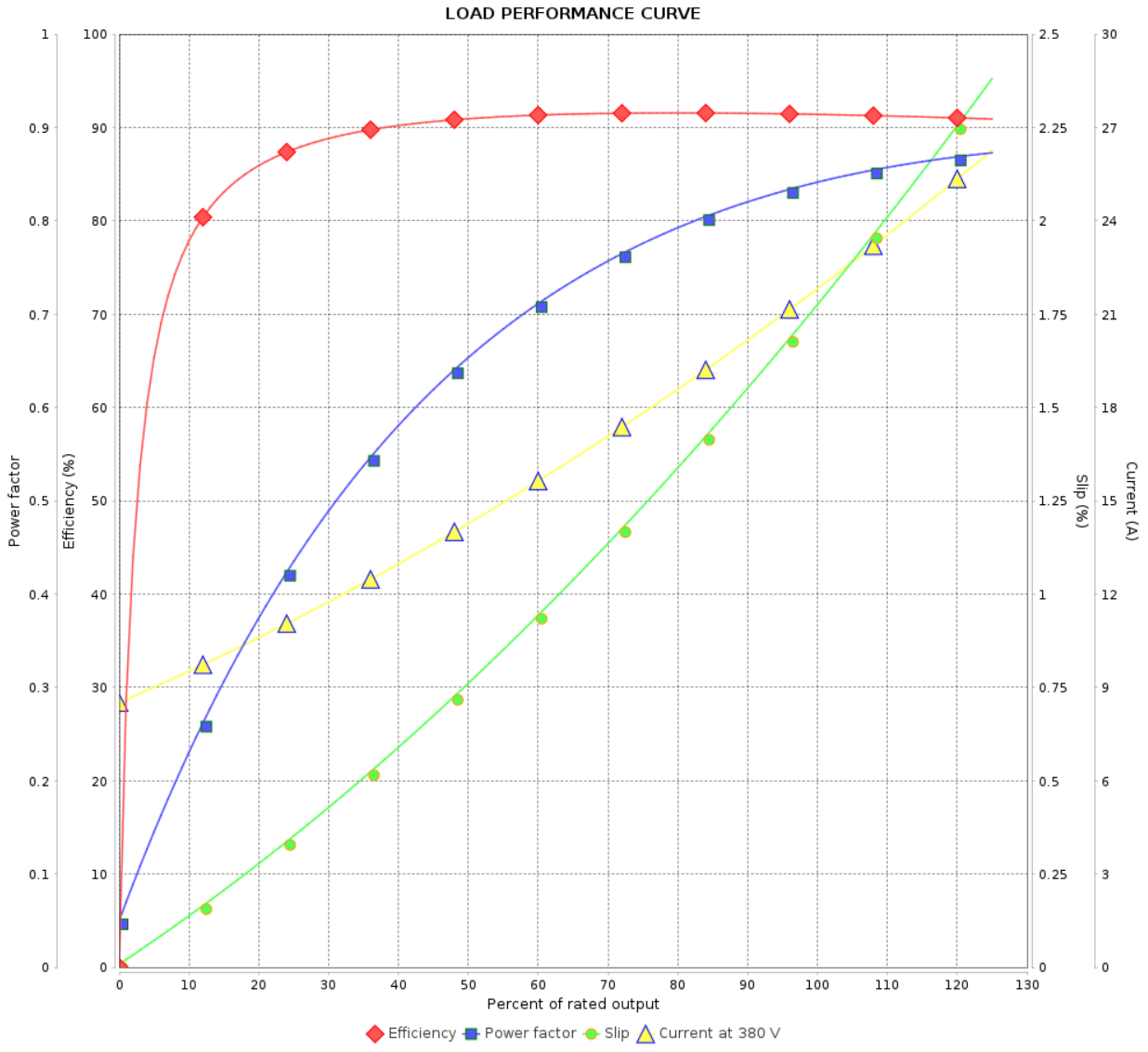
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Three Phase Induction Motor - Squirrel Cage

Customer :

Product line	: W22 Close Coupled Pump JP NEMA Premium Efficiency Three-Phase	Product code :	12353067



Performance	: 380 V 50 Hz 4P IE3		
Rated current	: 21.8 A	Moment of inertia (J)	: 0.1305 kgm²
LRC	: 7.4	Duty cycle	: Cont.(S1)
Rated torque	: 7.39 kgfm	Insulation class	: F
Locked rotor torque	: 250 %	Service factor	: 1.00
Breakdown torque	: 290 %	Temperature rise	: 80 K
Rated speed	: 1473 rpm	Design	: B

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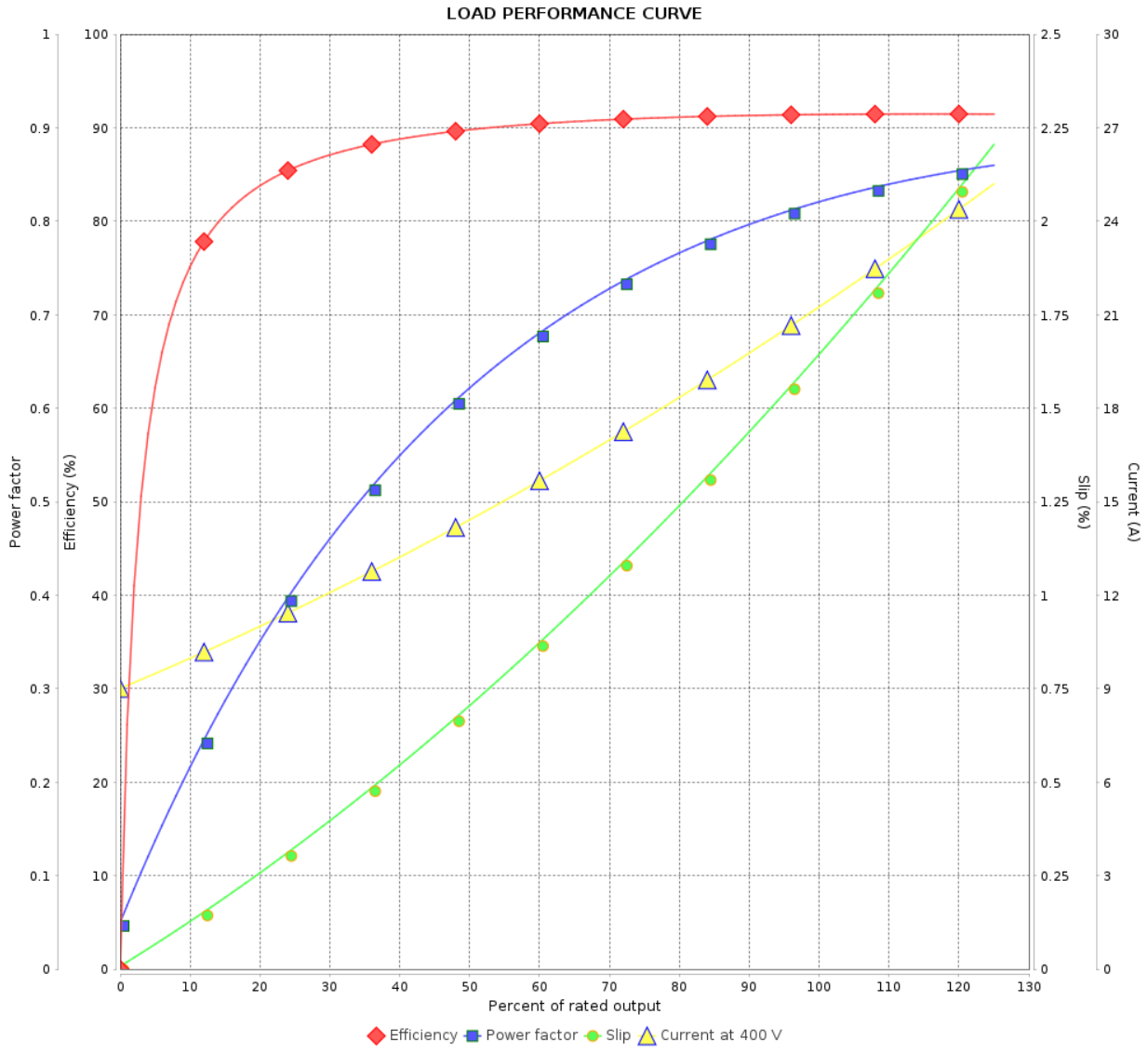
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Three Phase Induction Motor - Squirrel Cage

Customer :

Product line	: W22 Close Coupled Pump JP NEMA Premium Efficiency Three-Phase	Product code :	12353067



Performance	: 400 V 50 Hz 4P IE3		
Rated current	: 21.2 A	Moment of inertia (J)	: 0.1305 kgm²
LRC	: 7.9	Duty cycle	: Cont.(S1)
Rated torque	: 7.38 kgfm	Insulation class	: F
Locked rotor torque	: 280 %	Service factor	: 1.00
Breakdown torque	: 320 %	Temperature rise	: 80 K
Rated speed	: 1475 rpm	Design	: B

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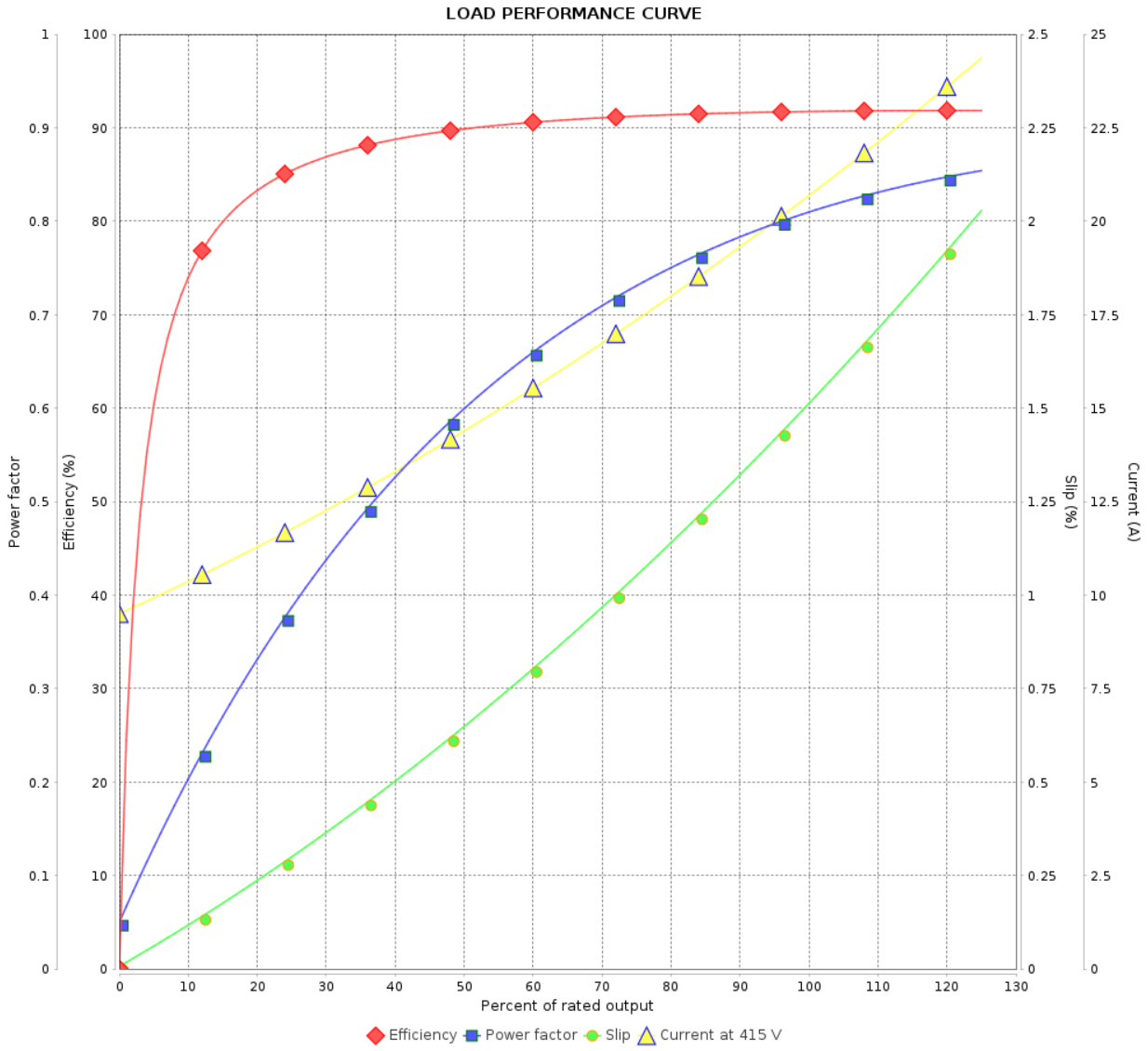
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Three Phase Induction Motor - Squirrel Cage

Customer	:

Product line	: W22 Close Coupled Pump JP NEMA Premium Efficiency Three-Phase	Product code :	12353067



Performance	: 415 V 50 Hz 4P IE3

Rated current	: 20.6 A	Moment of inertia (J)	: 0.1305 kgm²
LRC	: 8.4	Duty cycle	: Cont.(S1)
Rated torque	: 7.37 kgfm	Insulation class	: F
Locked rotor torque	: 300 %	Service factor	: 1.00
Breakdown torque	: 340 %	Temperature rise	: 80 K
Rated speed	: 1477 rpm	Design	: B

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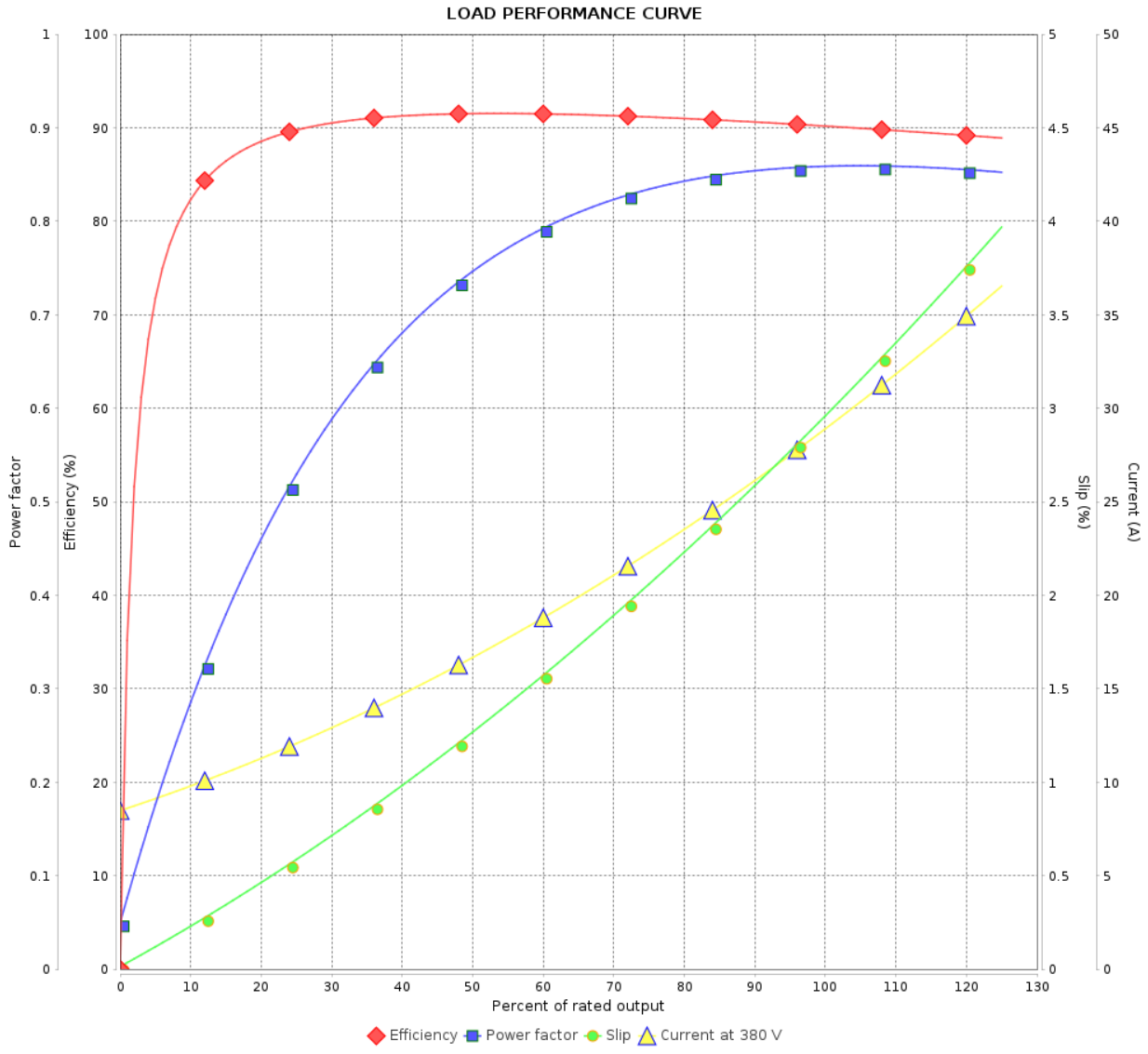
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Three Phase Induction Motor - Squirrel Cage

Customer :

Product line	: W22 Close Coupled Pump JP NEMA Premium Efficiency Three-Phase	Product code :	12353067



Performance	: 380 V 50 Hz 4P IE1		
Rated current	: 29.4 A	Moment of inertia (J)	: 0.1305 kgm²
LRC	: 5.7	Duty cycle	: Cont.(S1)
Rated torque	: 9.98 kgfm	Insulation class	: F
Locked rotor torque	: 190 %	Service factor	: 1.00
Breakdown torque	: 210 %	Temperature rise	: 105 K
Rated speed	: 1455 rpm	Design	: B

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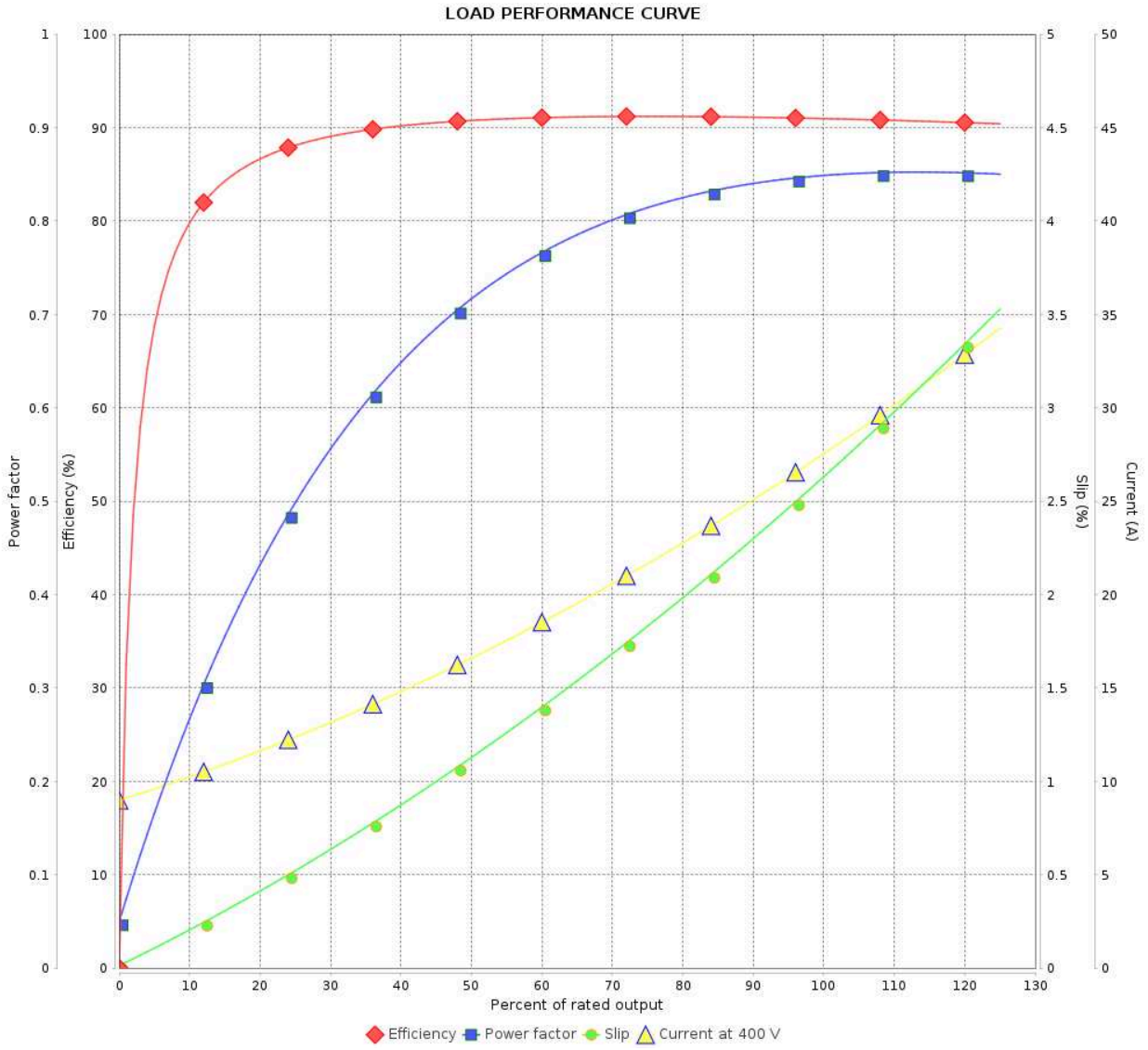
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Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : W22 Close Coupled Pump JP NEMA Premium Efficiency Three-Phase

Product code : 12353067



Performance	: 400 V 50 Hz 4P IE2		
Rated current	: 28.0 A	Moment of inertia (J)	: 0.1305 kgm²
LRC	: 6.2	Duty cycle	: Cont.(S1)
Rated torque	: 9.94 kgfm	Insulation class	: F
Locked rotor torque	: 210 %	Service factor	: 1.00
Breakdown torque	: 229 %	Temperature rise	: 105 K
Rated speed	: 1460 rpm	Design	: B

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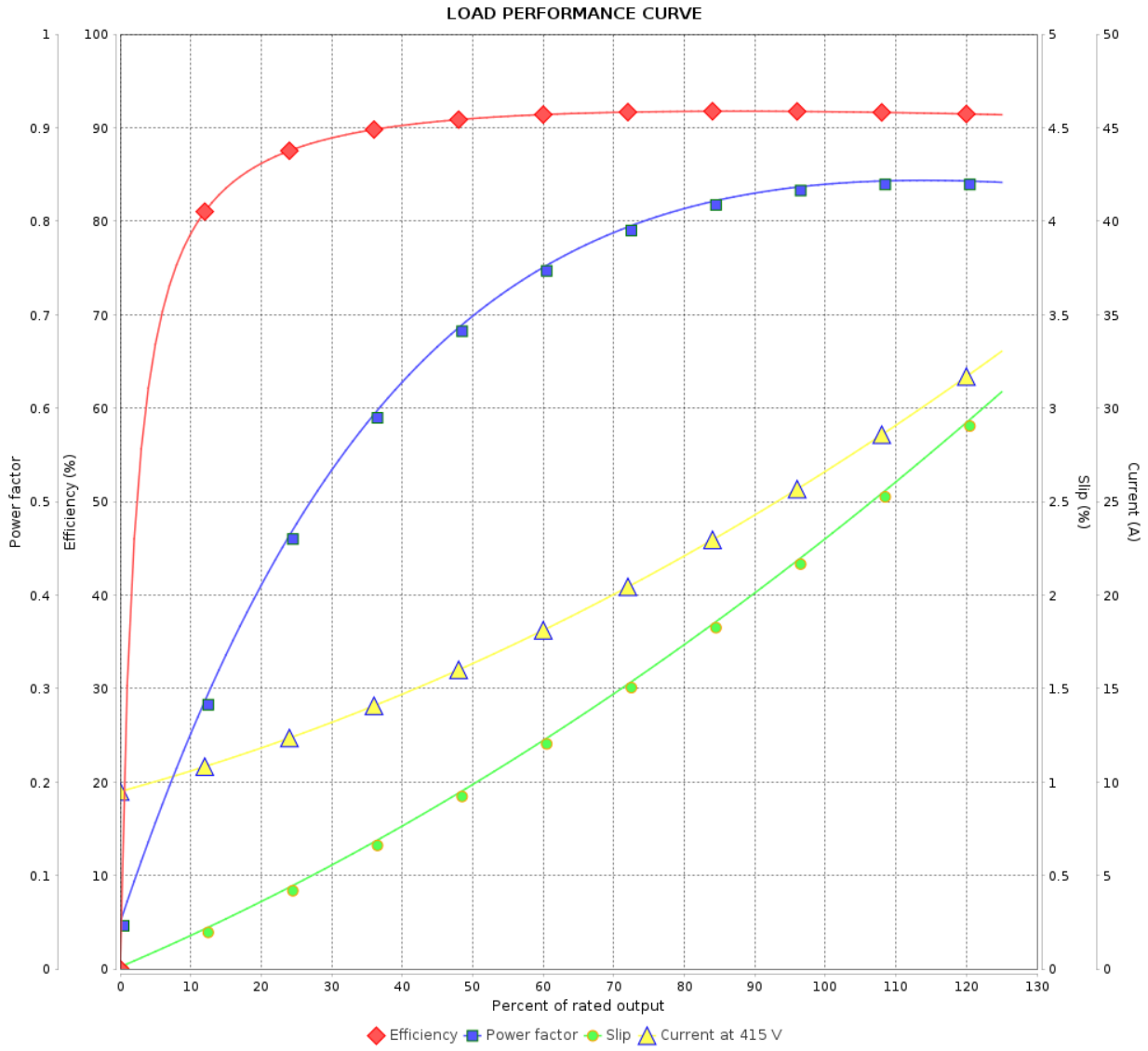
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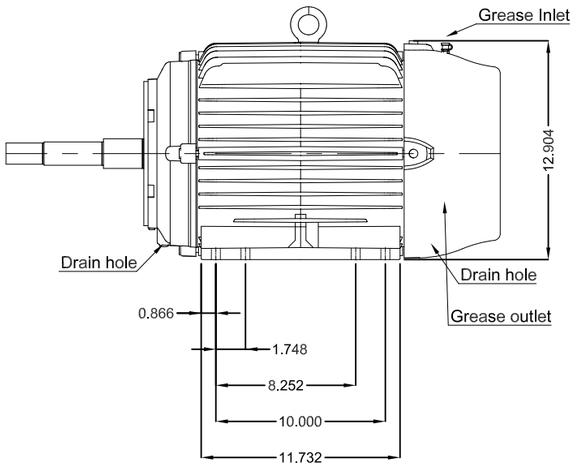


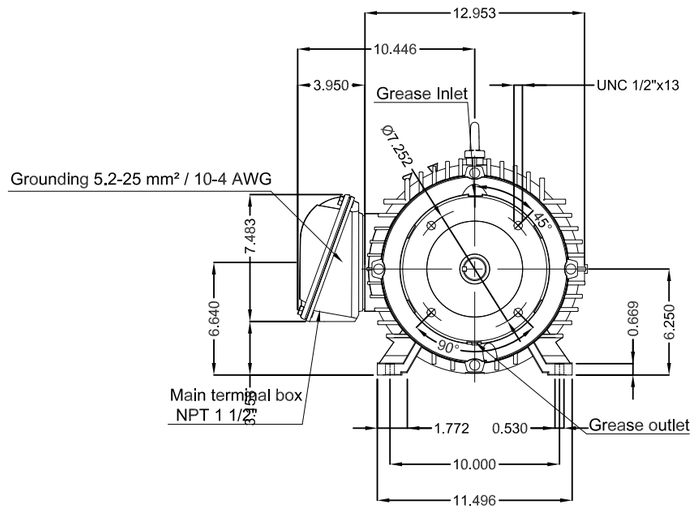
Performance	: 415 V 50 Hz 4P IE2		
Rated current	: 27.1 A	Moment of inertia (J)	: 0.1305 kgm²
LRC	: 6.6	Duty cycle	: Cont.(S1)
Rated torque	: 9.91 kgfm	Insulation class	: F
Locked rotor torque	: 229 %	Service factor	: 1.00
Breakdown torque	: 260 %	Temperature rise	: 105 K
Rated speed	: 1465 rpm	Design	: B

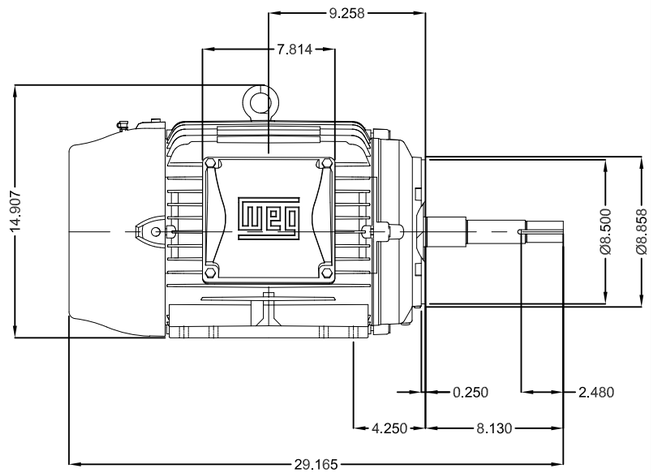
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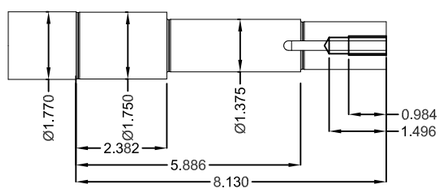
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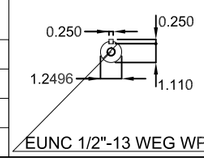








DE Shaft End



EUNC 1/2"-13 WEG WPR-7309

Color RAL 5009
Painting plan 203A
Mounting NEMA F-1
Mounting B34R(D)

20 HP 04 Poles 60 Hz | A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
			HYBRISUSER				00

EXECUTED	HYBRISUSER
CHECKED	
RELEASED	
REL. DATE	

THREE PH. MOTOR JM/JP/JET PUMP W22 NEMA PREM. EFF.
FRAME 254/6JP IP55 TEFC

PREVIEW
WDD 00
SHEET /

Dimensions in inches

A3

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