

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line : W22 NEMA Premium Efficiency Three-Phase		Product code : 13025320			
Frame : 404/5TSC	Insulation class : F	Cooling method : IC411 - TEFC	Mounting : F-1		
Duty cycle : Cont.(S1)	Ambient temperature : -20°C to +40°C	Rotation ¹ : Both (CW and CCW)	Starting method : Direct On Line		
Altitude : 1000 m.a.s.l.	Protection degree : IP55	Approx. weight ³ : 521 kg	Moment of inertia (J) : 0.5561 kgm ²		
Design : B					
Output [HP]	100	75	75	75	
Poles	2	2	2	2	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	224/112	99.6	94.6	92.2	
L. R. Amperes [A]	1456/728	677	719	756	
LRC [A]	6.5x(Code G)	6.8x(Code G)	7.6x(Code H)	8.2x(Code J)	
No load current [A]	52.0/26.0	25.7	27.5	29.1	
Rated speed [RPM]	3545	2955	2960	2965	
Slip [%]	1.53	1.50	1.33	1.17	
Rated torque [kgfm]	20.5	18.4	18.4	18.4	
Locked rotor torque [%]	240	250	280	300	
Breakdown torque [%]	260	280	310	330	
Service factor	1.25	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	25s (cold) 14s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	18s (cold) 10s (hot)	
Noise level ²	79.0 dB(A)	74.0 dB(A)	74.0 dB(A)	74.0 dB(A)	
Efficiency (%)	25%				
	50%	93.0	93.0	93.1	
	75%	94.1	93.8	93.8	
	100%	94.1	94.3	94.3	
Power Factor	25%				
	50%	0.83	0.82	0.80	
	75%	0.88	0.88	0.86	
	100%	0.89	0.89	0.89	
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	5.9	5.9	5.9	5.9
	P2 (0,5;1,0)	4.6	4.6	4.6	4.6
	P3 (0,25;1,0)	4.4	4.4	4.4	4.4
	P4 (0,9;0,5)	2.8	2.8	2.8	2.8
	P5 (0,5;0,5)	1.6	1.6	1.6	1.6
	P6 (0,5;0,25)	0.9	0.9	0.9	0.9
	P7 (0,25;0,25)	0.5	0.5	0.5	0.5
Bearing type	Drive end : 6314 C3	Non drive end : 6314 C3	Foundation loads		
Sealing	: WSeal	: WSeal	Max. traction	: 336 kgf	
Lubrication interval	: 4000 h	: 4000 h	Max. compression	: 857 kgf	
Lubricant amount	: 27 g	: 27 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). (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	18/03/2024			1 / 6	

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Notes
USABLE @208V 243A SF 1.10 SFA 268A

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	18/03/2024		2 / 6	

LOAD PERFORMANCE CURVE

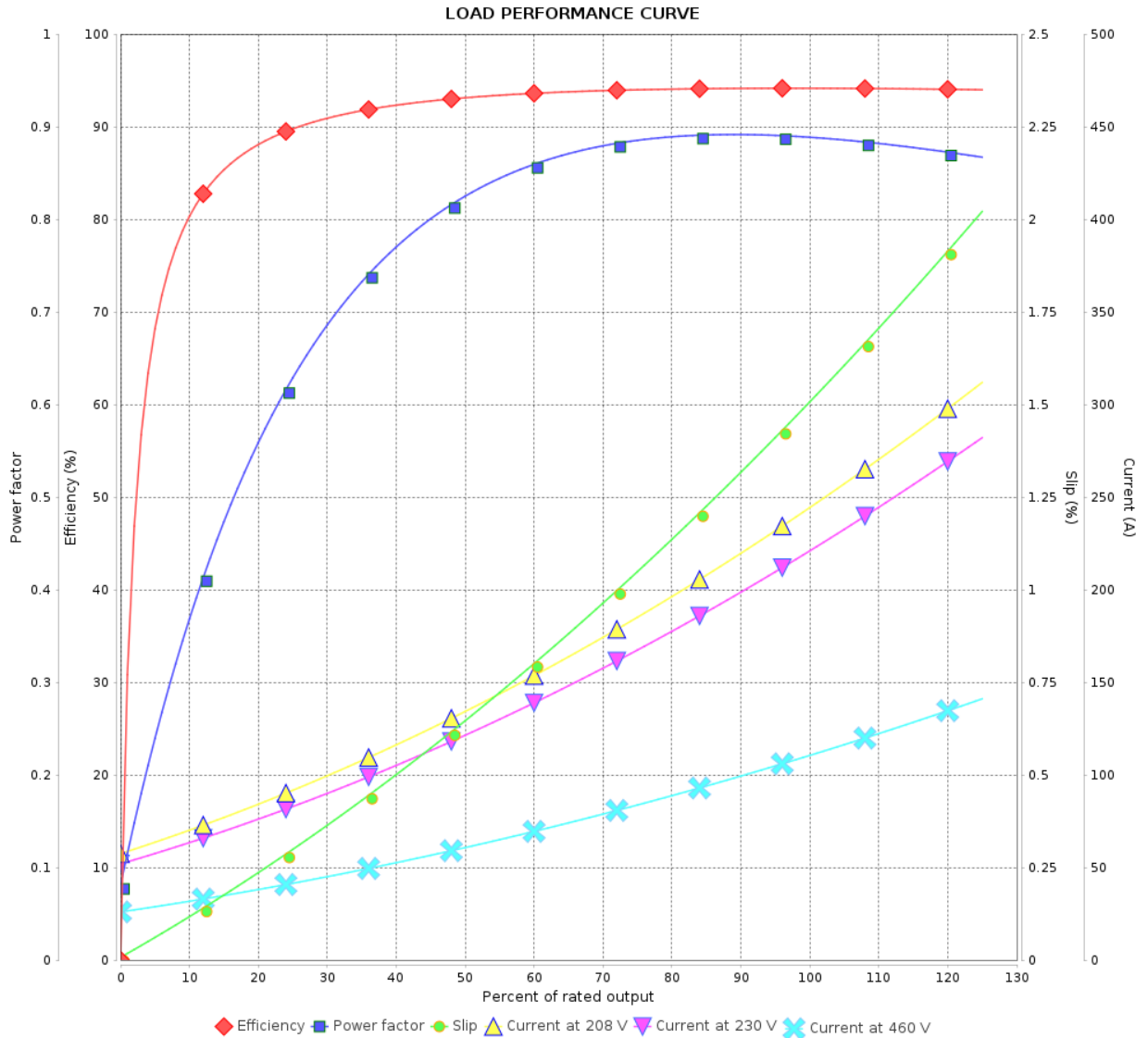
Three Phase Induction Motor - Squirrel Cage



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Product line : W22 NEMA Premium Efficiency Three-Phase

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Performance : 230/460 V 60 Hz 2P

Rated current : 224/112 A
 LRC : 6.5
 Rated torque : 20.5 kgfm
 Locked rotor torque : 240 %
 Breakdown torque : 260 %
 Rated speed : 3545 rpm

Moment of inertia (J) : 0.5561 kgm²
 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				

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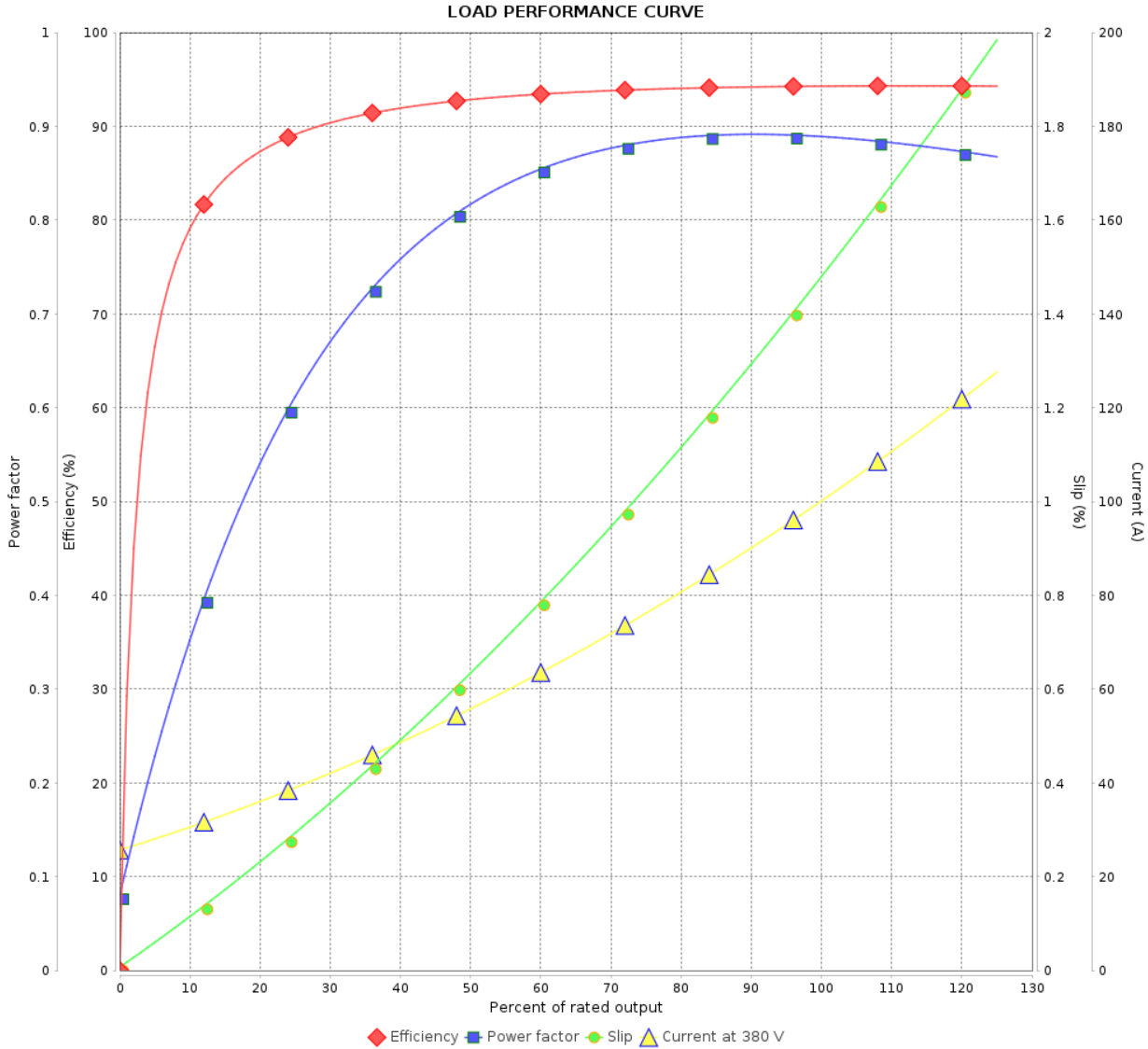
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W22 NEMA Premium Efficiency Three-Phase

Product code : 13025320



Performance : 380 V 50 Hz 2P IE3

Rated current : 99.6 A
 LRC : 6.8
 Rated torque : 18.4 kgfm
 Locked rotor torque : 250 %
 Breakdown torque : 280 %
 Rated speed : 2955 rpm

Moment of inertia (J) : 0.5561 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by			Page 4 / 6	Revision
Checked by				
Date	18/03/2024			

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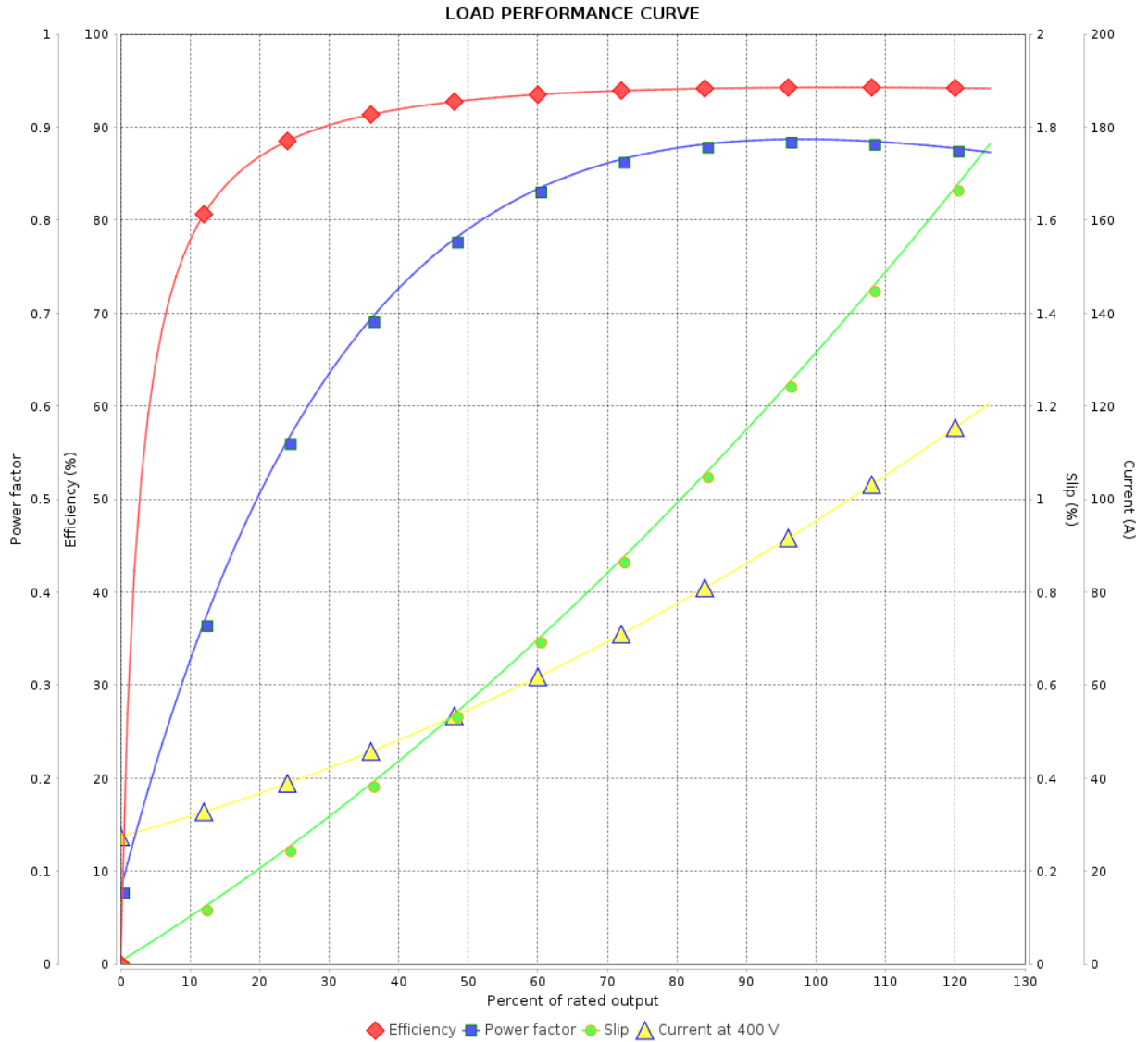
Three Phase Induction Motor - Squirrel Cage



Customer : _____

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Performance : 400 V 50 Hz 2P IE3

Rated current : 94.6 A
 LRC : 7.6
 Rated torque : 18.4 kgfm
 Locked rotor torque : 280 %
 Breakdown torque : 310 %
 Rated speed : 2960 rpm

Moment of inertia (J) : 0.5561 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

Rev.	Changes Summary	Performed	Checked	Date
Performed by		Page		Revision
Checked by		5 / 6		
Date		18/03/2024		

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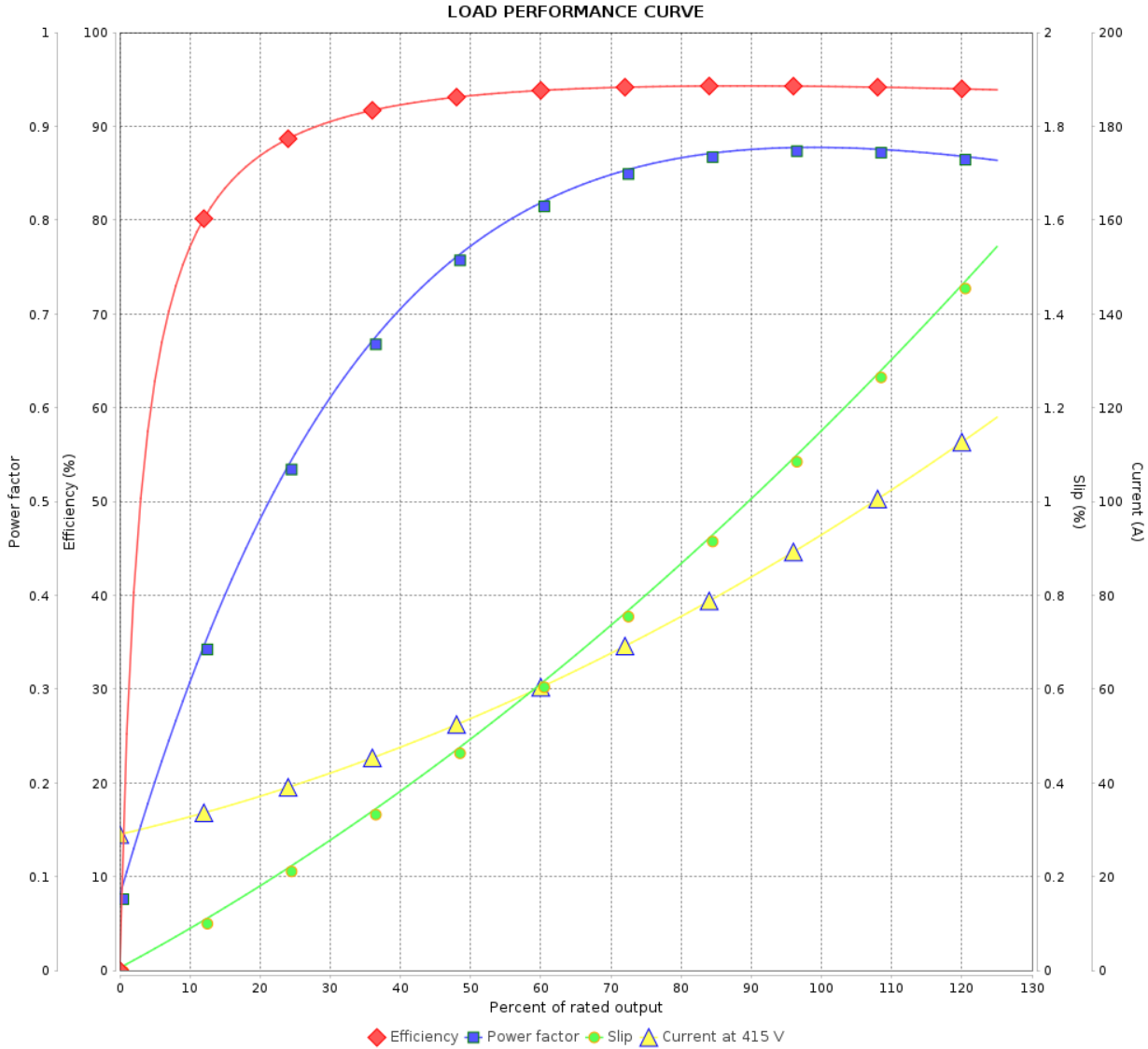
Three Phase Induction Motor - Squirrel Cage



Customer :

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Performance : 415 V 50 Hz 2P IE3

Rated current : 92.2 A
 LRC : 8.2
 Rated torque : 18.4 kgfm
 Locked rotor torque : 300 %
 Breakdown torque : 330 %
 Rated speed : 2965 rpm

Moment of inertia (J) : 0.5561 kgm²
 Duty cycle : Cont.(S1)
 Insulation class : F
 Service factor : 1.00
 Temperature rise : 80 K
 Design : B

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