

DATA SHEET



Three Phase Induction Motor - Squirrel Cage

Customer :					
Product line	: W21 Explosion Proof NEMA Premium Efficiency Three-Phase	Product code :	14325202		
Frame	: 213/5T	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 ³	: 89.4 kg		
Protection degree	: IP55	Moment of inertia (J)	: 0.0504 kgm ²		
Design	: B				
Output [HP]	3	3	3	3	
Poles	6	6	6	6	
Frequency [Hz]	60	50	50	50	
Rated voltage [V]	230/460	380	400	415	
Rated current [A]	8.82/4.41	5.28	5.15	5.11	
L. R. Amperes [A]	61.7/30.9	31.7	33.5	35.8	
LRC [A]	7.0x(Code K)	6.0x(Code H)	6.5x(Code J)	7.0x(Code K)	
No load current [A]	5.00/2.50	2.40	2.60	2.80	
Rated speed [RPM]	1175	970	975	975	
Slip [%]	2.08	3.00	2.50	2.50	
Rated torque [kgfm]	1.85	2.24	2.23	2.23	
Locked rotor torque [%]	180	155	180	210	
Breakdown torque [%]	290	229	250	270	
Service factor	1.15	1.00	1.00	1.00	
Temperature rise	80 K	80 K	80 K	80 K	
Locked rotor time	104s (cold) 58s (hot)	72s (cold) 40s (hot)	72s (cold) 40s (hot)	72s (cold) 40s (hot)	
Noise level ²	55.0 dB(A)	53.0 dB(A)	53.0 dB(A)	53.0 dB(A)	
Efficiency (%)	25%	85.4	83.4	83.5	83.5
	50%	86.5	84.0	84.0	84.0
	75%	88.5	84.0	84.0	84.0
	100%	89.5	84.4	84.4	84.4
Power Factor	25%	0.29	0.36	0.32	0.30
	50%	0.50	0.57	0.53	0.50
	75%	0.62	0.70	0.66	0.64
	100%	0.70	0.75	0.73	0.71
Losses at normative operating points (speed;torque), in percentage of rated output power					
Losses (%)	P1 (0,9;1,0)	11.0	17.3	17.3	17.3
	P2 (0,5;1,0)	8.4	13.2	13.2	13.2
	P3 (0,25;1,0)	7.5	11.8	11.8	11.8
	P4 (0,9;0,5)	6.8	10.6	10.6	10.6
	P5 (0,5;0,5)	4.3	6.8	6.8	6.8
	P6 (0,5;0,25)	3.4	5.3	5.3	5.3
	P7 (0,25;0,25)	2.4	3.7	3.7	3.7
Bearing type	: Drive end : 6308 2RS Non drive end : 6207 2RS	Foundation loads			
Sealing	: Oil Seal Lip Seal	Max. traction : 66 kgf			
Lubrication interval	: - -	Max. compression : 156 kgf			
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.		
Rev.	Changes Summary		Performed	Checked	Date
Performed by					
Checked by				Page	Revision
Date	15/01/2024			1 / 7	

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer : _____

Notes
USABLE @208V 9.75A SF 1.15 SFA 11.2A

Rev.	Changes Summary	Performed	Checked	Date
Performed by				
Checked by			Page	Revision
Date	15/01/2024		2 / 7	

DATA SHEET

Three Phase Induction Motor - Squirrel Cage



Customer : _____

Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

Rev.	Changes Summary	Performed	Checked	Date
Performed by				Page 3 / 7
Checked by				
Date	15/01/2024			
			Revision	

LOAD PERFORMANCE CURVE

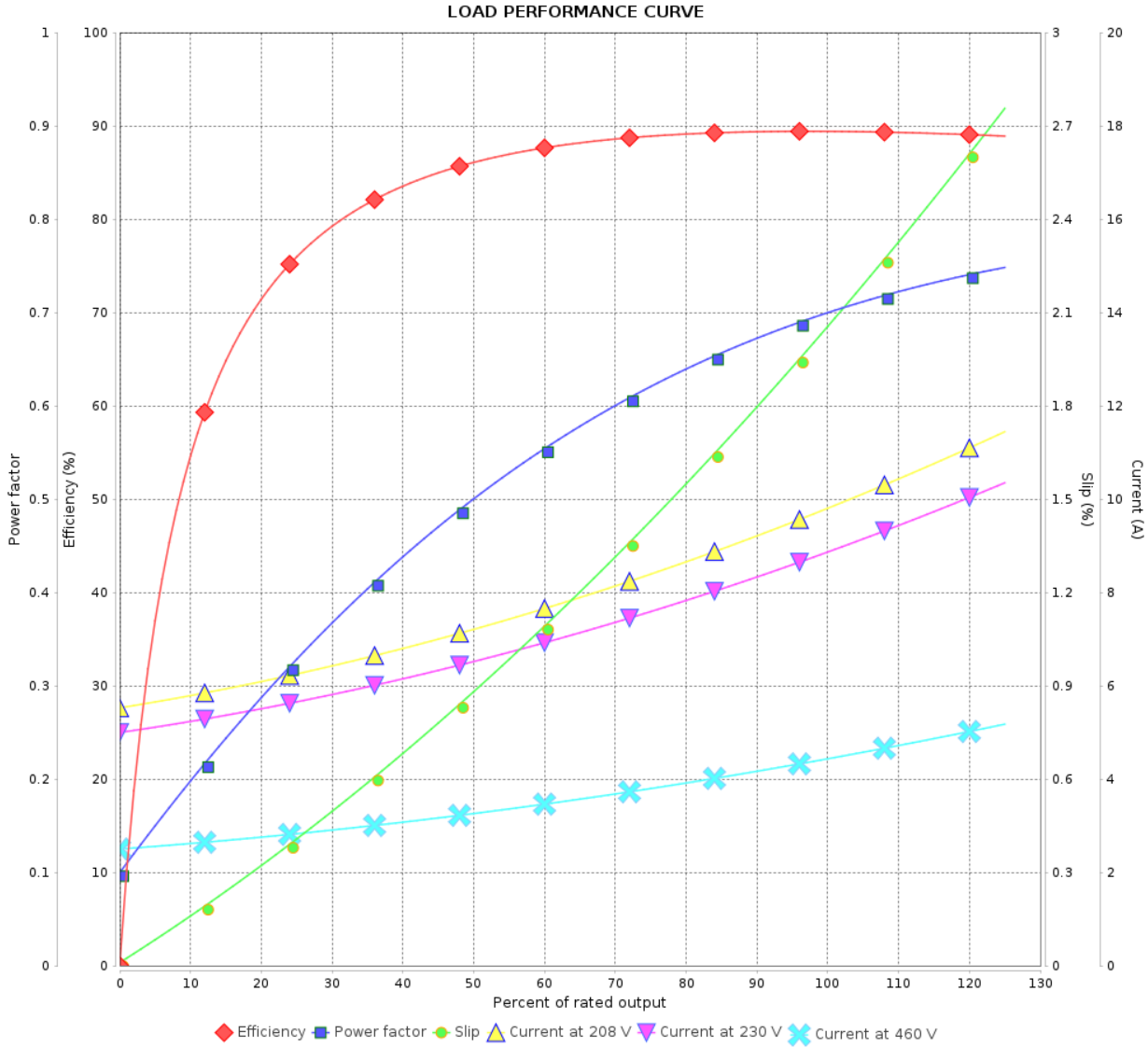
Three Phase Induction Motor - Squirrel Cage



Customer : _____

Product line : W21 Explosion Proof NEMA Premium
Efficiency Three-Phase

Product code : 14325202



Performance : 230/460 V 60 Hz 6P

Rated current : 8.82/4.41 A
 LRC : 7.0
 Rated torque : 1.85 kgfm
 Locked rotor torque : 180 %
 Breakdown torque : 290 %
 Rated speed : 1175 rpm

Moment of inertia (J) : 0.0504 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	Revision
Checked by				
Date				

LOAD PERFORMANCE CURVE

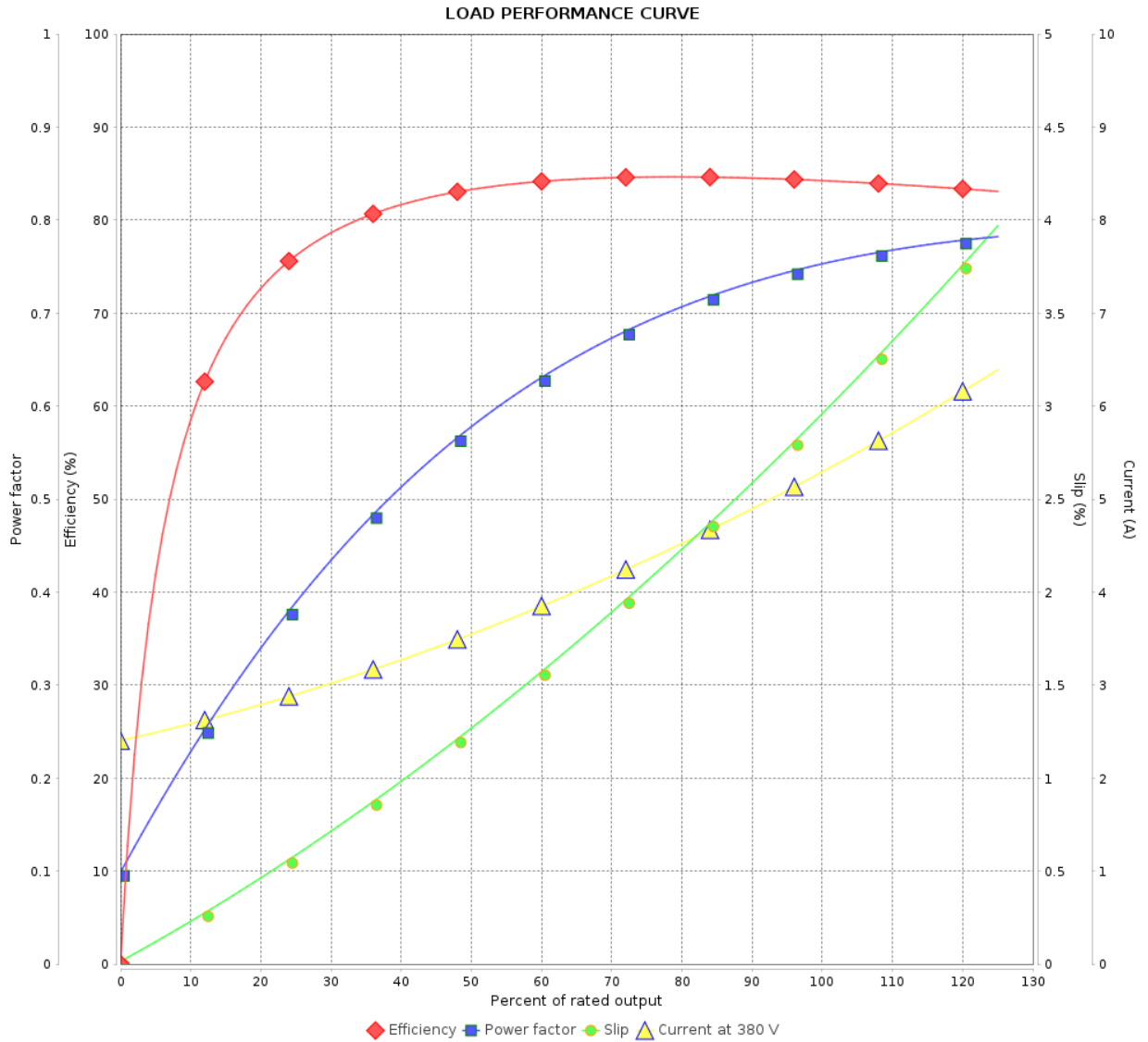
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium
Efficiency Three-Phase

Product code : 14325202



Performance : 380 V 50 Hz 6P IE3

Rated current : 5.28 A
LRC : 6.0
Rated torque : 2.24 kgfm
Locked rotor torque : 155 %
Breakdown torque : 229 %
Rated speed : 970 rpm

Moment of inertia (J) : 0.0504 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				

LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage

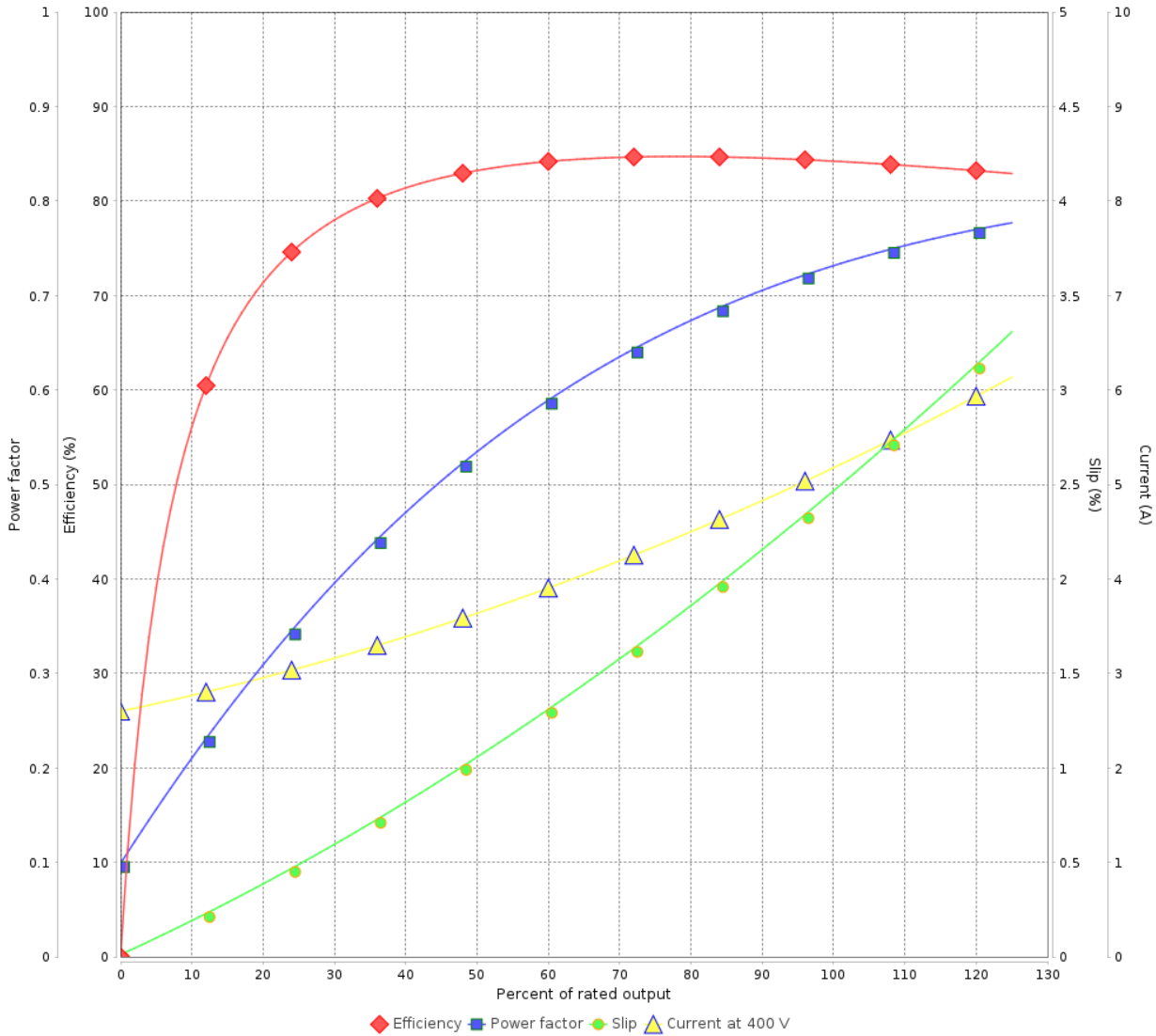


Customer : _____

Product line : W21 Explosion Proof NEMA Premium
Efficiency Three-Phase

Product code : 14325202

LOAD PERFORMANCE CURVE



Performance : 400 V 50 Hz 6P IE3

Rated current : 5.15 A
LRC : 6.5
Rated torque : 2.23 kgfm
Locked rotor torque : 180 %
Breakdown torque : 250 %
Rated speed : 975 rpm

Moment of inertia (J) : 0.0504 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				

LOAD PERFORMANCE CURVE

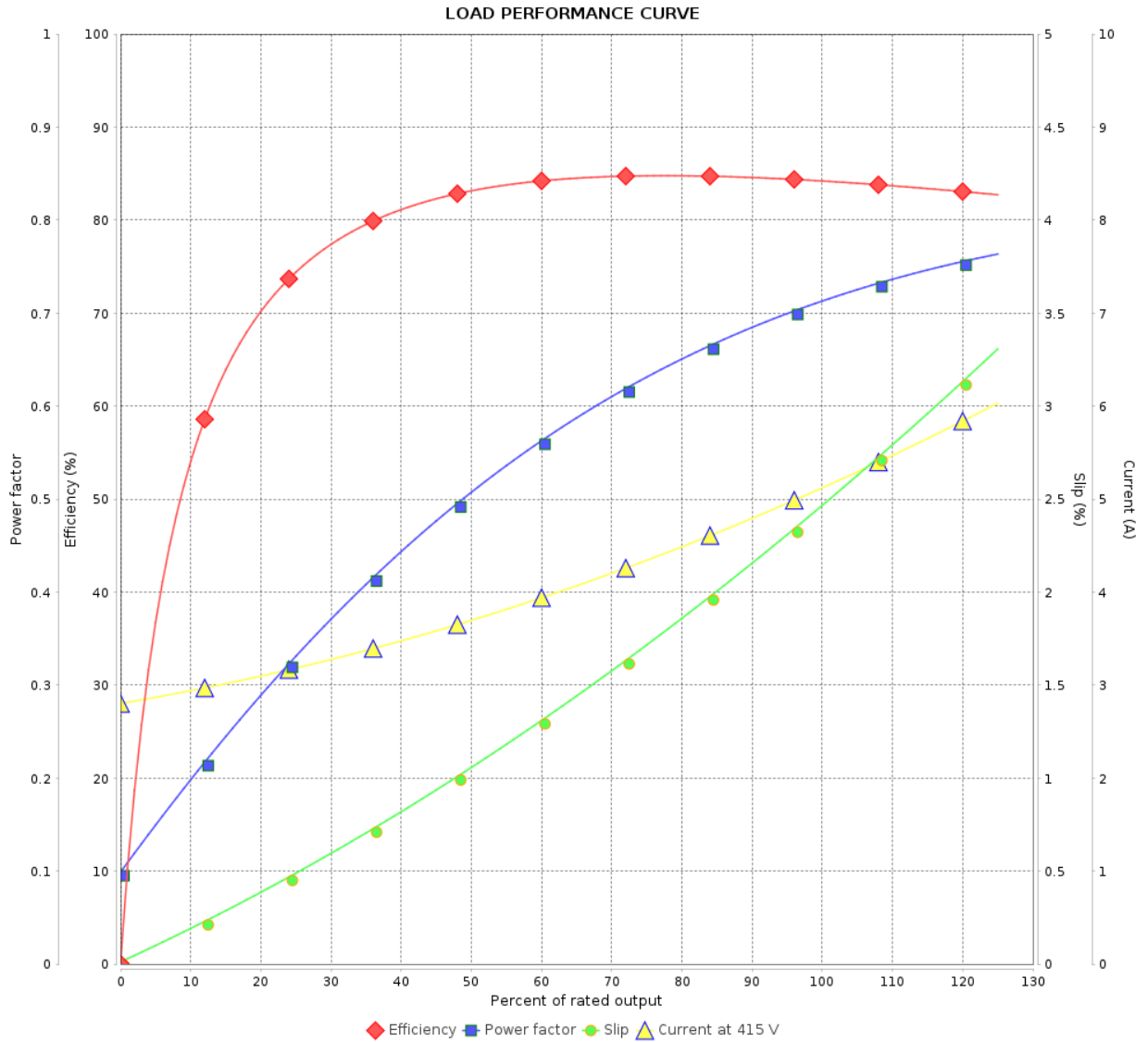
Three Phase Induction Motor - Squirrel Cage



Customer :

Product line : W21 Explosion Proof NEMA Premium
Efficiency Three-Phase

Product code : 14325202



Performance : 415 V 50 Hz 6P IE3

Rated current : 5.11 A
LRC : 7.0
Rated torque : 2.23 kgfm
Locked rotor torque : 210 %
Breakdown torque : 270 %
Rated speed : 975 rpm

Moment of inertia (J) : 0.0504 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				