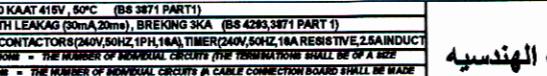
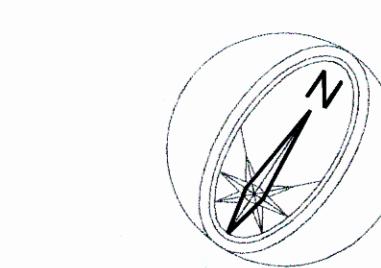


NAME OF PROJECT:	ENG. ADNAN FAHAD AL NUM	MINIATURE CIRCUIT BREAKERS (MCB): BREAKING 10 KAAT 416V, 50°C (BS 3871 PART 1)	الاخصي للاستشارات الهندسية														
LOCATION:	GROUND FLOOR	RESIDUAL CURRENT CIRCUIT BREAKER (RCCB): EARTH LEAKAGE (30mA,20ms), BREAKING 3KA (BS 4220,3871 PART 1)															
REF ID:	CODE 1 DB_1	CONTACTORS AND DIGITAL TIMERS (BS 776/IEC 158.1): CONTACTORS 6x40V,50HZ,1PH,1NO,TIMER (240V,50HZ,16A RESISTIVE, 2.5A INDUCTIVE CONNECTION BAR: THE NUMBER OF CABLE TERMINATIONS - THE NUMBER OF INDIVIDUAL CIRCUITS (THE TERMINATIONS SHALL BE OF A 1NO/1NC TYPE)															
FED FROM:	S.M.S.B	EARTH CONNECTION BAR: THE NUMBER OF CABLE TERMINATIONS - THE NUMBER OF INDIVIDUAL CIRCUITS / A CABLE CONNECTION BOARD SHALL															
MOUNTING:	SURFACE MOUNTED	MAIN ISOLATOR: 63A ATP & N ISOLATOR (BS 5420)															
THICKNESS NOT LESS THAN 15mm	FROM FLOOR LEVEL TO BOTTOM OF THE D.E. AND MAXIMUM HEIGHT	OF THIS D.E. SHALL BE 2200 mm															
12 WAYS TP & N				INCOMING CABLE:			4C X 25mm <sup>2</sup> + 1C X 16mm <sup>2</sup>			PVC+PVC/ECC			LOAD IN WATTS				
NO.	CKT REF	CIRCUIT BREAKER	CONTROL	CABLE		LOCATION	LOAD								R	Y	B
				A	ELCB		TYPE	SIZE mm <sup>2</sup>	TYPE	LIMITS MP	LIMITS	FAN	R.IELS	UNIT			
1	R 15	-	MCB	3X2.5	PVC+PVC	FACTORY1	18		100				0				1800
	Y 15	-	MCB	3X2.5	PVC+PVC	FACTORY2	18		100				0				1600
2	B 10	-	MCB	3X2.5	PVC+PVC	DINING HALL	8		100				0				900
	R 10	-	MCB	3X2.5	PVC+PVC	BRIDGE	7		100				0				700
3	Y 10	30	RCBO	3X2.5	PVC+PVC	W.C, PANTRY	8	2	2	100			0				1000
	B 15	30	RCBO	3X2.5	PVC+PVC	W.C, SHOWER	11	3	1	100			0				1500
4	R 5	30	RCBO	3X2.5	PVC+PVC	ENT	1			300			0				300
	Y 10	30	RCBO	3X2.5	PVC+PVC	PANTRY				0			0			500	500
5	B	-	-	-	-	SPARE				0			0				0
	R 15	30	RCBO	3X2.5	PVC+PVC	FACTORY1		1	1300				0				1300
6	Y 15	30	RCBO	3X2.5	PVC+PVC	FACTORY2		1	1300				0				1300
	B 30	30	RCBO	4X4+2X2.5	PVC+PVC	DINING HALL			5	100			0				500
7	R 15	30	RCBO	3X2.5	PVC+PVC	FACTORY1		1	1300				0				1300
	Y 15	30	RCBO	3X2.5	PVC+PVC	FACTORY2		1	1300				0				1300
8	B	-	-	-	-	SPARE				0			0				0
	R 15	30	RCBO	-	4X4+2X2.5	PVC+PVC	FACTORY1		6	100			0				600
9	Y 15	30	RCBO	-	4X4+2X2.5	PVC+PVC	FACTORY2		6	100			0				600
	B 15	30	RCBO	-	3X4.0	PVC+PVC	PANTRY		0		2000		0				2000
10	R	-	-	-	-	SPARE		0		0			0				0
	Y 15	30	RCBO	-	4X4+2X2.5	PVC+PVC	PANTRY	1	4	100			0				500
11	B	15	30	RCBO	3X4.0	PVC+PVC	W.C		0		2000		0				2000
	R 20	-	MCB	3X4.0	PVC+PVC	DINING HALL			0			1.5	2500				2500
12	Y 20	-	MCB	3X4.0	PVC+PVC	PANTRY			0			1.0	2000				2000
	B 30	-	MCB	3X4.0	PVC+PVC	DINING HALL			0			2.0	3000				3000
C - CONTROL ON/OFF FROM MAIN SWITCH IN CONTROL ROOM																	
ABBREVIATIONS:				TOTAL CONNECTED LOAD													
PH - PHOTO CELL MODULE WITH MANUAL OVERRIDE SWITCH				TOTAL NO. LUMPS MP	TOTAL NO. LUMPS	TOTAL NO. LUMPS	TOTAL NO. LUMPS	TOTAL NO. LUMPS	UNIT	TOTAL CH.		E.W.H	TOTAL A/C	COOKER	PUMP	TOTAL	
D - 10A THYRISTOR FIRED DIMMING MODULE				LUMPS MP	LUMPS	LUMPS	LUMPS	LUMPS	UNIT	CH.		W.H	A/C	COOKER	PUMP	TOTAL	
E - EMERGENCY LIGHT				100	0	0	4000	7500	0	4000		0	500	2000	2000	9900	

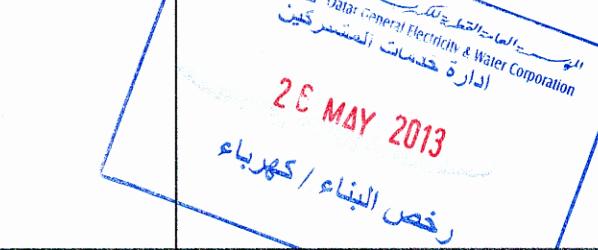
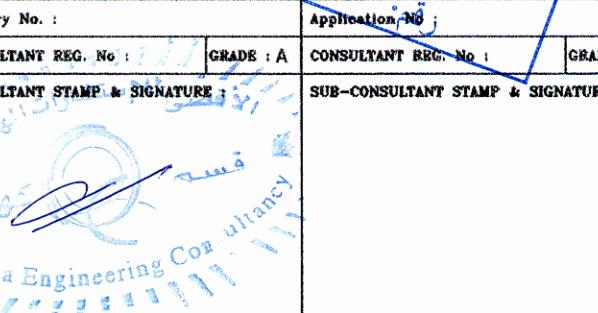
NAME OF PROJECT:	ENG. ADNAN FAHAD AL NAIMI	MINIATURE CIRCUIT BREAKER(S) (MCB): BREAKING 10 KA AT 415V, 50°C (BS 3871 PART 1)	الأقصى للاستشارات الهندسية																								
LOCATION:	FIRST FLOOR	RESIDUAL CURRENT CIRCUIT BREAKER (RCCB): EARTH LEAKAGE (30mA,20ms), BREAKING 3KA (BS 4283,3871 PART 1)																									
DB REF:	CODE 2 DB 3	CONTACTORS AND DIGITAL TIMERS (BS 7735EC 158.1); CONTACTORS(240V,50Hz,1PH,16A), TIMER(240V,50Hz,10A)RESISTIVE,2.5A																									
FED FROM:	6.6.6.B	NEUTRAL CONNECTION BAR: THE NUMBER OF CABLE TERMINATIONS = THE NUMBER OF INDIVIDUAL CIRCUITS (THE TERMINATIONS SHALL BE OF A EARTH CONNECTION BAR); THE NUMBER OF CABLE TERMINATIONS = THE NUMBER OF INDIVIDUAL CIRCUITS IN CABLE CONNECTION BOARD SHALL																									
OUNTING:	SURFACE MOUNTED	MAIN ISOLATOR: 63 A TP & N ISOLATOR (BS 5420)																									
FIREST NOT LESS THAN 220mm FROM PRESSED FLOOR LEVEL TO BOTTOM OF THE D.E. AND MAXIMUM HEIGHT OF THE D.E. SHALL BE 2200 mm				INCOMING CABLE:			4C X 25mm <sup>2</sup> + 1C X 16mm <sup>2</sup>			PVC/PVC+PVC/ECC																	
<b>8 WAYS TP &amp; N</b>																											
NO.	CKT	CIRCUIT BREAKER	CONTROL	CABLE		LOCATION	LOADS										LOAD IN WATTS										
				REF	A		ELCB	TYPE	SIZE mm <sup>2</sup>	TYPE	LIMITS IMP	LIGHTS	FAN	R.JLS	UNIT	CHANDLER	LN/ CHANDLER	E.W.H UNIT	A/C/TONE	A/C UNIT	COOKER UNIT	PUMP UNIT	R	Y	B		
1	R	5	-	MCB		3X2.5	PVC+PVC	OFFICE1	6		100				0				600								
	Y	15	-	MCB		3X2.5	PVC+PVC	RECEPTION	15		100				0					1500							
2	B	5	-	MCB		3X2.5	PVC+PVC	OFFICE3	6		100				0						600						
	R	10	-	MCB		3X2.5	PVC+PVC	OFFICE2,PANTRY	8		100				0					800							
3	Y	-	-	-		-	-	SPARE			0				0						0						
	B	15	30	RCBO		3X2.5	PVC+PVC	OFFICE4,W.C	6	7	2	100			0					1500							
4	R	30	30	RCBO		4X4+2X2.5	PVC+PVC	OFFICE1			4	100			0					400							
	Y	30	10	RCBO		4X4+2X2.5	PVC+PVC	RECEPTION			5	100			0						600						
5	B	30	30	RCBO		4X4+2X2.5	PVC+PVC	OFFICE3			4	100			0						400						
	R	30	30	RCBO		4X4+2X2.5	PVC+PVC	OFFICE2			4	100			0					400							
6	Y	-	-	-		-	-	SPARE			0				0						0						
	B	30	30	RCBO		4X4+2X2.5	PVC+PVC	OFFICE4			4	100			0						400						
7	R	30	30	RCBO		4X4+2X2.5	PVC+PVC	PANTRY			1	4	100			0					500						
	Y	-	-	-		-	-	SPARE			0				0						0						
8	B	20	-	MCB		3X4.0	PVC+PVC	OFFICE3			0				1.5	2500					2500						
	R	15	30	RCBO		3X4.0	PVC+PVC	PANTRY			0				2000	0					2000						
9	Y	20	-	MCB		3X4.0	PVC+PVC	OFFICE4			0				1.0	2000					2000						
	B	20	-	MCB		3X4.0	PVC+PVC	OFFICE3			0				1.5	2500					2500						
10	R	30	-	MCB		3X6.0	PVC+PVC	OFFICE1			0				2.0	3000					3000						
	Y	20	-	MCB		3X6.0	PVC+PVC	RECEPTION			0				2.0	3000					3000						
11	B	20	-	MCB		3X4.0	PVC+PVC	OFFICE4			0				1.5	2500					2500						
	R	30	-	MCB		3X6.0	PVC+PVC	OFFICE2			0				2.5	3500					3500						
12	Y	30	-	MCB		3X6.0	PVC+PVC	RECEPTION			0				2.5	3500					3500						
	B	-	-	-		-	-	SPARE			0				0						0						
C - CONTROL ON/OFF FROM MAIN SWITCH IN CONTROL ROOM																	PHASE LOAD			32200							
PH - PHOTO CELL MODULE WITH MANUAL OVERRIDE SWITCH																	TOTAL CONNECTED LOAD			32200							
D - 10A THYRISTOR FIRED DIMMING MODULE																	TOTAL NO. LUMINAIRES IMP	TOTAL NO. LUMINAIRES	TOTAL NO. BULBS	UNIT	TOTAL CH.	E.W.H	TOTAL A/C	COOKER	PUMP	TOTAL	
E - EMERGENCY LIGHT																	6	42	3	26	100	0	2000	22500	0	0	32200
ABBREVIATIONS:																											

NAME OF PROJECT :	ENG. ADNAN FAHAD AL NAME	MINIATURE CIRCUIT BREAKERS (MCB) : BREAKING 10 KAAT 415V, 50°C (BS 3871 PART 1)	 <p>الأقصى للاستشارات الهندسية</p>																		
LOCATION:	OUT BUILDING	RESIDUAL CURRENT CIRCUIT BREAKER (RCCB) : EARTH LEAKAG (30mA/20ms), BREAKING 3KA (BS 4283,3871 PART 1)																			
DB REF:	CODE 4	CONTACTORS AND DIGITALTIMERS/ BS 775MEC 158.1; CONTACTORS/240V,50HZ,1PH,16A, TIMER/240V,50HZ,16A RESISTIVE,2.5A INDUCTIVE																			
FED FROM:	S.M.S.B	NEUTRAL CONNECTION BAR : THE NUMBER OF CABLE TERMINATIONS = THE NUMBER OF INDIVIDUAL CIRCUITS (THE TERMINATIONS SHALL BE OF A SIZE																			
MOUNTING:	SURFACE MOUNTED	EARTH CONNECTION BAR : THE NUMBER OF CABLE TERMINATIONS = THE NUMBER OF INDIVIDUAL CIRCUITS A CABLE CONNECTION BOARD SHALL BE MADE																			
HEIGHT NOT LESS THAN 125mm FROM FINISHED FLOOR LEVEL TO BOTTOM OF THE D.E. AND		MAIN ISOLATOR: 40A SP & N ISOLATOR (BS 5420)																			
DB 7 (4WAYS SP&N) FOR GUARD ROOM 2		INCOMING CABLE:	2C X 16mm <sup>2</sup> + 1C X 16mm <sup>2</sup>	PVC/SWA/PVC+PVC/ECC																	
CKT REF	CIRCUIT BREAKER	CABLE		LOCATION	LOAD								LOAD IN WATTS								
		A	ELCB		TYPE	CONTROL	SIZE mm <sup>2</sup>	TYPE	LIGHTS WATT	LIGHTS	FAN	R.M.S	UNIT	CHANDLER	UNIT CHANDLER	E.W.H UNIT	A/C/TONE	A/C UNIT	COOKER UNIT	PUMP UNIT	
1	10	30	RCBO	-	3X2.5	-	GUARD ROOM, PANTRY, BATH	3	3	1	100				0					700	
2	10	30	RCBO	-	3X2.5	-	SURP PUMP				0				0					500	500
3	30	30	RCBO	-	4X4+2X2.5	PVC+PVC	GUARD ROOM, PANTRY		1	6	100				0					700	
4	15	30	RCBO	-	3X4.0	-	BATH				0				2000	0				2000	
5	20	-	MCB	-	3X4.0	-	GUARD ROOM, PANTRY				0				1.0	2000				2000	
6	-	-	-	-	-	-	SPARE				0				0					0	
C - CONTROL ON/OFF FROM MAIN SWITCH IN CONTROL ROOM										PHASE LOAD								5900			
										TOTAL CONNECTED LOAD											
PH - PHOTO CELL MODULE WITH MANUAL OVERRIDE SWITCH										TOTAL CONNECTED LOAD								5900			
										TOTAL CONNECTED LOAD											
D - 10A THYRISTOR FIRE DIMMING MODULE										TOTAL NO.	TOTAL NO.	TOTAL NO.	TOTAL NO.	UNIT	TOTAL CH.	E.W.H	TOTAL A/C	COOKER	PUMP	TOTAL	
										LIGHTS WATT	IND. LIGHTS	FAN	R.M.S	UNIT	TOTAL CH.	E.W.H	TOTAL A/C	COOKER	PUMP	TOTAL	
E - EMERGENCY LIGHT										-	-	-	-	100	0	2000	2000	0	500	5900	

NAME OF PROJECT :	ENG. ADNAN FAHAD AL NAIMI	MINIATURE CIRCUIT BREAKERS (MCB): BREAKING 10 KAAT 415V, 50°C (BS 3871 PART 1)	الأقصى للاستشارات الهندسية																				
LOCATION:	OUT BUILDING	RESIDUAL CURRENT CIRCUIT BREAKER (RCCB): EARTH LEAKAGE (30mA, 20ms), BREAKING 3KA (BS 4289,3871 PART 1)																					
DB REF:	CODE 4	CONTACTORS AND DIGITAL TIMER: 8x 775MEC (10A); CONTACTORS 8 (240V, 50HZ, 1PH, 16A), TIMER (240V, 50HZ, 16A) RESISTIVE 2A INDUCTIVE																					
FED FROM:	S.M.S.B	NEUTRAL CONNECTION BAR : THE NUMBER OF CABLE TERMINATIONS = THE NUMBER OF INDIVIDUAL CIRCUITS (THE TERMINATIONS SHALL BE OF A SIZE																					
MOUNTING: SURFACE MOUNTED	THICKNESS NOT LESS THAN 12mmes FROM FLOOR LEVEL TO BOTTOM OF THE D.B. AND	EARTH CONNECTION BAR : THE NUMBER OF CABLE TERMINATIONS = THE NUMBER OF INDIVIDUAL CIRCUITS (A CABLE CONNECTION BOARD SHALL BE MADE																					
MAIN ISOLATOR: 40A SP & N ISOLATOR (BS 5420)	MAIN ISOLATOR: 40A SP & N ISOLATOR (BS 5420)	MAIN ISOLATOR: 40A SP & N ISOLATOR (BS 5420)																					
DB 7 (4WAYS SP&N) FOR GUARD ROOM1	INCOMING CABLE:	2C X 16mm <sup>2</sup> + 1C X 16mm <sup>2</sup>	PVC/SWA/PVC+PVC/ECC																				
CKT REF	CIRCUIT BREAKER					LOCATION	LOAD								LOAD IN WATTS								
	A	ELCB	TYPE	CONTROL	CABLE		SIZE mm <sup>2</sup>	TYPE	LIGHTS WATT	LIGHTS	FAN	R.I.M.S	UNIT	CHANDLER	UNIT CHANDLER	E.W.H UNIT	A/C/TONE	A/C UNIT	COOKER UNIT	PUMP UNIT			
1	10	30	RCBO	-	3X2.5	-	GUARD ROOM, PANTRY, BATH	3	3	1	100					0				700			
2	10	30	RCBO	-	3X2.5	-	SPUR PUMP				0					0				500	500		
3	30	30	RCBO	-	4X4+2X2.5	PVC+PVC	GUARD ROOM, PANTRY			1	6	100				0				700			
4	15	30	RCBO	-	3X4.0	-	BATH				0				2000	0			2000				
5	20	-	MCB	-	3X4.0	-	GUARD ROOM, PANTRY				0				1.0	2000			2000				
6	-	-	-	-	-	-	SPARE				0				0				0				
ABBREVIATIONS:	C - CONTROL ON/OFF FROM MAIN SWITCH IN CONTROL ROOM												PHASE LOAD								5900		
	PH - PHOTO CELL MODULE WITH MANUAL OVERRIDE SWITCH												TOTAL CONNECTED LOAD										
	D - 10A THYRISTOR FIRED DIMMING MODULE												TOTAL NO.	TOTAL NO.	TOTAL NO.	TOTAL NO.	UNIT	TOTAL CH.	E.W.H	TOTAL A/C	COOKER	PUMP	TOTAL
E - EMERGENCY LIGHT												LIGHTS WATT											
													3	3	2	6	100	0	2000	2000	0	500	5900



69105  
21560001

U.D.D STAMP		MUNICIPALITY STAMP	
 <p style="text-align: center;">28 MAY 2013</p> <p style="text-align: center;">رخصة البناء / كهرباء</p>			
Enquiry No. :		Application No. :	
CONSULTANT REG. No. :	GRADE : A	CONSULTANT REG. No. :	GRADE : A
CONSULTANT STAMP & SIGNATURE :		SUB-CONSULTANT STAMP & SIGNATURE :	
			
TECHNICAL MANAGER :		TECHNICAL MANAGER	
REGISTRATION No. :		REGISTRATION No. :	
 <p><b>الأقصى الاستشارات الهندسية</b></p> <p><b>AI- AQSA</b> Engineering Consultancy (Q.E.C)</p>			
PROJECT			
<h1 style="text-align: center;"><b>AGRI GREEN</b></h1> <p style="text-align: center;">FACTORY(G), OFFICE(G+1), STORE AND DINING ROOM</p>			
LOCATION: INDUSTRIAL AREA			
CLIENT: ENG. ADNAN FAHAD AL NAIMI			
DATE: OCTOBER, 2012		JOB NO.:	
TITLE: ELECTRICAL LAYOUT			
D.B DETAILS			
DRAWING NO.: E-05		SCALE: N.T.S	
DRAWN BY: ENG:AHMED ATTIA		DESIGNED BY: ENG:AHMED ATTIA	
CHECKED BY: ENG:AHMED ATTIA			
CAD FILE: ARCH. MOHD RADWAN		REGISTRATION No. :	
REGISTRATION No. :			
REVISION		SIGNATURE	
		SIGNATURE	