## CLIENT: AL KARAM TOWEL

## PROJECT: M/S Supply of PANELS FOR AL KARAM TOWEL

COMPONENTS COSTING AS PER PROVIDED B.O.Q.

DESC	RIPTION	RATING		MAKE	QTY		
SUPPI	AMP SC SUPPLY OF NEW 2500A BREAKER, COPPER MAIN BUS AND LINKS IN EXISTING PANEL						
	INCOMING FROM K.E 1						
	P (ADJ.)	2500A	100kA	ABB	1		
	OR MECHANISM 220V AC			ABB	1		
UVT	T OBENING			ABB	1		
	T OPENING			ABB	1		
	T CLOSING	2500/54		ABB METLEX	1		
CTs	E INDICATION LIGHTS (DAVID)	2500/5A			3		
	E INDICATION LIGHTS (R/Y/B) ROL MCB / FUSE + BASE	2A		S.A./CAMSCO CAMSCO / HIMEL	6		
	AR PER PHASE + NEUTRAL		CED//ICEC	LOVATA			
	AR EARTH	2X100 X 5 80 X 05	SERVICES SERVICES	LOVATA	8		
	SUPPLY OF 3200A AUTO PHASE REVERSAL PANEL           ACB TP(ADJ.)         4000A         100kA         ABB						
UVT	( ( ( ) ( )	220VAC	10007	ABB	2		
	T OPENING	220VAC		ABB	2		
	T CLOSING	220VAC		ABB	2		
CTs	OR MECHANISM	220VAC	+	ABB FICO/METALEX	3		
	GY ANALYZER	220VAC	R/Y/B	CIRCUTOR / EQU	1		
	E INDICATION LIGHTS (R/Y/B)	220VAC 2A	r\/ I/D	CIRCUTOR / EQU CAMSCO / HIMEL	3		
	ROL MCB / FUSE + BASE	4000/5A		CAMSCO / HIMEL	3		
OON	NOE WOB / LOGE L BAGE	4000/0/1		O/WOOO / THIVILL			
	ROL SECTION:			INTED/FOLL			
				INTER/EQU.	1 2		
	R WITH BASE	000//40		AUTONICS/ EQU.			
	ATION LIGHTS (NORMAL G)	220VAC		CAMSCO / HIMEL	1		
	ATION LIGHTS (ABNORMAL R)	220VAC		CAMSCO / HIMEL	1		
	ROL MCB / FUSE + BASE	2A		CAMSCO / HIMEL	2		
DHVC	E SEQUENCE RELAY			EMIREL/EQU.	1		
					1 1		
CONT	ROL RELAY WITH BASE			PHOENIX			
CONT THERI EXHAL	MOSTATE RELAY UST FAN WITH FILTER LY OF 2000A CHANGE OVER PANEL	2004		IMPORTED IMPORTED	1 2		
CONT THERI EXHAI SUPPI ACB T	MOSTATE RELAY UST FAN WITH FILTER	2000A 220VAC 220VAC	100kA	IMPORTED	1		
CONT THERI EXHAI SUPPI ACB T UVT SHUN	MOSTATE RELAY UST FAN WITH FILTER  LY OF 2000A CHANGE OVER PANEL P(ADJ.)	220VAC	100kA	IMPORTED IMPORTED  ABB ABB	1 2		
CONT THERI EXHAL SUPPI ACB T UVT SHUN	MOSTATE RELAY UST FAN WITH FILTER  LY OF 2000A CHANGE OVER PANEL TP(ADJ.) T OPENING	220VAC 220VAC	100kA	IMPORTED IMPORTED  ABB ABB ABB	1 2		
SUPPI ACB T UVT SHUN MOTO	MOSTATE RELAY UST FAN WITH FILTER  LY OF 2000A CHANGE OVER PANEL TP(ADJ.) T OPENING T CLOSING OR MECHANISM	220VAC 220VAC 220VAC 220VAC 220VAC		IMPORTED IMPORTED  ABB ABB ABB ABB ABB ABB	1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
CONT THERI EXHAI SUPPI ACB T UVT SHUN MOTO	MOSTATE RELAY UST FAN WITH FILTER  LY OF 2000A CHANGE OVER PANEL TP(ADJ.) T OPENING T CLOSING	220VAC 220VAC 220VAC 220VAC 220VAC	100kA	IMPORTED IMPORTED  ABB ABB ABB ABB ABB ABB ABB	1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
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SUPPI ACB T UVT SHUN MOTO	MOSTATE RELAY UST FAN WITH FILTER  LY OF 2000A CHANGE OVER PANEL TP(ADJ.) T OPENING T CLOSING OR MECHANISM TP(ADJ.) T OPENING T CLOSING T CLOSING	220VAC 220VAC 220VAC 220VAC 220VAC 2000A 220VAC 220VAC 220VAC 220VAC		IMPORTED IMPORTED  ABB ABB ABB ABB ABB ABB ABB ABB ABB A	1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
SUPPI ACB T UVT SHUN MOTO	MOSTATE RELAY UST FAN WITH FILTER  LY OF 2000A CHANGE OVER PANEL P(ADJ.)  T OPENING T CLOSING OR MECHANISM  TOPENING T CLOSING OR MECHANISM	220VAC 220VAC 220VAC 220VAC 220VAC 220VAC 220VAC 220VAC 220VAC 220VAC 220VAC	100kA	IMPORTED IMPORTED  ABB ABB ABB ABB ABB ABB ABB ABB ABB A	1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
SUPPI ACB T UVT SHUN MOTO  ACB T UVT SHUN MOTO  ACB T UVT SHUN SHUN MOTO	MOSTATE RELAY UST FAN WITH FILTER  LY OF 2000A CHANGE OVER PANEL P(ADJ.)  T OPENING T CLOSING OR MECHANISM  TOPENING T CLOSING OR MECHANISM  TOPENING T CLOSING OR MECHANISM	220VAC		IMPORTED IMPORTED  ABB ABB ABB ABB ABB ABB ABB ABB ABB A	1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
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SUPPI  CONT THERI EXHAI  SUPPI  ACB T UVT SHUN SHUN MOTO  CTS ENER PHASI CONT TIMER INDIC, INDIC, CONT M-O-A THERI EXHAI  SUPPI	MOSTATE RELAY UST FAN WITH FILTER  LY OF 2000A CHANGE OVER PANEL P(ADJ.)  T OPENING T CLOSING OR MECHANISM  TP(ADJ.)  T OPENING T CLOSING OR MECHANISM  GY ANALYZER E INDICATION LIGHTS (R/Y/B) ROL MCB / FUSE + BASE  ROL SECTION: R WITH BASE ATION LIGHTS (NORMAL G) ATION LIGHTS (ABNORMAL R) ROL MCB / FUSE + BASE  ROL MCB / FUSE + BASE  SELECTOR SWITCH MOSTATE RELAY UST FAN WITH FILTER  LY OF 900KVAR PFI	220VAC 22A 2A 2A 2A	100kA	IMPORTED IMPORTED  IMPORTED  ABB ABB ABB ABB ABB ABB ABB ABB ABB A	1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
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CONT THERI EXHAI  SUPPI ACB T UVT SHUN MOTO  ACB T UVT SHUN MOTO  CTs ENER PHASI CONT TIMER INDIC, INDIC, CONT THERI EXHAI  SUPPI ACB T CTs EXHAI	MOSTATE RELAY UST FAN WITH FILTER  LY OF 2000A CHANGE OVER PANEL P(ADJ.)  T OPENING T CLOSING OR MECHANISM  TP(ADJ.)  T OPENING T CLOSING OR MECHANISM  GY ANALYZER E INDICATION LIGHTS (R/Y/B) PROL MCB / FUSE + BASE  ATION LIGHTS (ABNORMAL R) PROL RELAY WITH BASE ASELECTOR SWITCH MOSTATE RELAY UST FAN WITH FILTER  LY OF 900KVAR PFI TP  AGE PFI RELAY	220VAC 2A 2A 2A 2A 2A 1600A 3200/5A	100kA	IMPORTED IMPORTED IMPORTED  ABB ABB ABB ABB ABB ABB ABB ABB ABB A	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
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MCCB TP	100A	25kA	OWNER PROVIDED	3					
6 X 25KVAR = 150 KVAR (3 VARIABLE STAGE)									
POWER FACTOR CAPACITOR @ 415VAC	25KVAR		OWNER PROVIDED	5					
POWER FACTOR CAPACITOR @ 415VAC	25KVAR		NOKIAN / EQU.	1					
MAGNETIC CONTACTOR TP @ AC-3	50A		FUJI / EQU.	3					
MCCB TP	50A	25kA	TERASAKI	3					
6x100KVAR=600KVAR (6 VARIABLE STAGE):									
POWER FACTOR CAPACITOR @ 415VAC	50KVAR		NOKIAN / EQU.	12					
MAGNETIC CONTACTOR TP @ AC-3	105A		FUJI / EQU.	12					
MCCB TP	100A	25kA	TERASAKI	12					
	•								
MANUAL - OFF - AUTO SWITCH		G/R	CAMSCO	12					
ON/OFF PUSH BUTTON (G/R)			S.A./CAMSCO	24					
ON/OFF INDICATION LIGHT (G/R)	2A	2A/5	CAMSCO / HIMEL	24					
CONTROL MCB / FUSE + BASE			EMAS	3					