

SINGLE LINE AND SCHEMATIC DIAGRAM
FOR LV MCC TRANSFER LINE

00	May-02 2026	FIRST ISSUED		MAHAMUD FIRMANW	AMINAHARD
Rev.	Date	Revisions description	Prepared	Checked	Approved

FOR REVIEW

Client	شركة ديسكو للهندسة والبناء Golgothar Iron & Steel Development Co. G.I.S.D.Co		Consultant:
بارسو شركة ديسكو للهندسة والبناء CONSULTING AND PROJECT MANAGEMENT			Job no
			Quoted from
			Replicates

Project Name		Family code/Machine code
Golgothar Steel Project		
		Weight (kg)
		J (kgm ³)
Title		
SINGLE LINE AND SCHEMATIC DIAGRAM FOR LV MCC TRANSFER LINE		

Client DWG Number	Revision	Format
S-SM01-D-BOP-WWTP-DWG-EL-001	00	A3
Hr. of sheets		5
Revision		
BARSOO DWG Number	157DEDG15001	00
		Follow
Sheet	1	OF 8

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FOR REVIEW

[illegible]

Client	مشروع تهيئة اقليم دوار بن علي Original line & Steel Development Co. G.I.S.D.Co 	Consultant:	
	بر سلسو شركة سلسو 		
	BARSOO		
	CONSULTING AND PROJECT MANAGEMENT		
		Job nr	
		Estimated from	
		Replices	

Project Name	Golgothar Steel Project		Family code/Machine code		
			Weight (Kg)		
			J (kg/m ³)		
Title					
				Scale	
				Format A3	
Client DWG Number	Revision	Nr. of sheets	Sheet	From	To
S-SM01-D-BOP-WWTP-DWG-EL-001	00	5	2	05	8
BARDSD DWG Number		157DDEDG15001			

SYMBOLS & LEGEND

ITEM	SYMBOL	DESCRIPTION	ITEM	SYMBOL	DESCRIPTION
1		CURRENT TRANSFORMER(3NOS.)	33		ALARM RELAY
2		WITHDRAWABLE POTENTIAL TRANSFORMER 3NOS.(3WINDINGS) WITH FUSE	34		TRANSFORMER DIFFERENTIAL RELAY
3		WITHDRAWABLE VACUUM CIRCUIT BREAKER	35		OIL LOW LEVEL SWITCH
4		Capacitive Insulator & Voltage Indicator(3Nos.)	36		GAS PRESSURE RELIEF VALVE/RELAY (BUCB HOLD)
5		AMMETER	37		SENSITIVE EARTH FAULT RELAY
6		VOLTMETER	38		OIL/WINDING OVER TEMPERATURE PROTECTION
7		ACTIVE POWER METER	39		WINDING OVER TEMPERATURE PROTECTION
8		REACTIVE POWER METER	40		TRIP CIRCUIT SUPERVISION
9		ACTIVE ENERGY METER	41		PHASE SEQUENCE VOLTAGE RELAY
10		REACTIVE ENERGY METER	42		OVER / UNDER FREQUENCY RELAY
11		FREQUENCY METER	43		RESTRICTED EARTH FAULT PROTECTION
12		POWER FACTOR METER	44		ANNUNCIATOR
13		CURRENT TEST BLOCK	45		LOAD UNBALANCE,NEGATIVE PHASE SEQUENCE RELAY
14		VOLTAGE TEST BLOCK	46		THERMAL OVER LOAD RELAY
15		CORE BALANCE CT	47		DIRECTIONAL OVER CURRENT RELAY
16		VOLTAGE SELECTOR SWITCH (7 POSITION)	48		VT SUPERVISION (FUSE FAILURE)
17		POWER SUPPLY	49		READY SIGNAL
18		SYNCHROCHECK RELAY	50		FUSE WITH FUSE BASE
19		UNDER VOLTAGE RELAY	51		NEUTRAL GROUNDING RESISTOR
20		RESIDUAL UNDERVOLTAGE RELAY	52		EARTH SWITCH
21		INSTANTANOUS OVER CURRENT RELAY	53		MINIATURE CIRCUIT BREAKER
22		OVERCURRENT RELAY WITH TIME DELAY	54		CABLE GLAND
23		INSTANTANOUS EARTH FAULT RELAY	55		SURGE ARRESTER
24		EARTH FAULT RELAY WITH TIME DELAY	56		POWER TRANSFORMER, WITH ON - LOAD TAP CHANGER
25		OVER VOLTAGE RELAY	57		ELECTRICAL INTERLOCK
26		UNDERCURRENT OR UNDERPOWER RELAY	58		MECHANICAL INTERLOCK
27		BEARING PROTECTIVE DEVICE RELAY	60		TERMINAL / LUG
28		MOTOR STARTING COUNTER FUNCTION	60		ALARM ANNUNCIATOR WITH 16 WINDOWS
29		LOCK OUT RELAY	61		DIGITAL MULTI METER
30		CIRCUIT BREAKER FAILURE	62		AUTOMATIC POWER FACTOR REGULATOR
31		RUN HOUR METER	63		LOCAL CONTROL BOX (WITH START/STOP/EMERGENCY STOP L/R SELECTOR SWITCH & AMMETER)
32		VACUUM CONTACTOR	64		

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			Prepared	Checked	Approved

FOR REVIEW

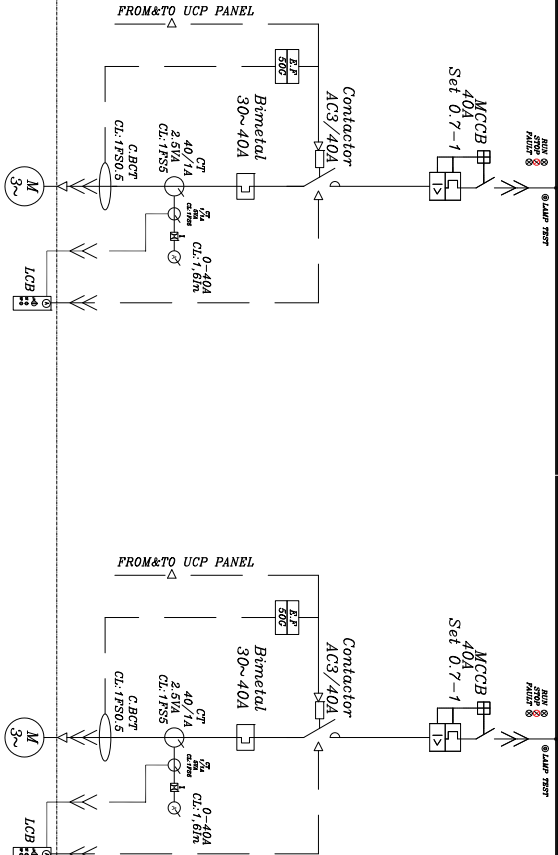
Client:	Consultant:
Golgothar Steel Project	
BARSOO Engineering and Project Management	
G.I.S.D.Co	
Job no.	
Drawings	
Revisions	

Project Name	Family code/Machine code
Golgothar Steel Project	
Title	Weight (kg)
SINGLE LINE AND SCHEMATIC DIAGRAM FOR LV MCC TRANSFER LINE	J (kgm ³)
Scale	
Revision	Formal
S-SM01-D-BOP-WWTP-DWG-EL-001	A3
BARSOO DWG Number	Nr. of sheets
157DEDG15001	5
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	Sheet
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NEW FEEDERNEW FEEDER

3PH+N+PE, 400V/230V, 50HZ , In.:4000 A, Isc.:100kA/1Sec.

EXISTED PANEL



FEEDER No.	1		2	
TYPE	EXISTED PANEL		OUTGOING TYPE M1	
ITEM TAG			PU06A - CONTINOUS	
DESIGNATION			----	
C.B	TYPE	MPCB (18.5KW- 100KA@1S)		MPCB (18.5KW- 100KA@1S)
CONTACTOR	TYPE	40A		40A
OVERLOAD RELAY	TYPE	----		----
MEASURING	AMMETER / VOLTMETER	----		----
	WATTMETER / VARMETER	----		----
	QUANTITY	----		----
P.T	RATIO	----		----
C.T	PROTECTION	----		----
	MEASURING	40/1-2.5 VA-1FS5		40/1-2.5 VA-1FS5
ZCT		1FS0.5		1FS0.5
RELAY TYPE		----		----
CONTROL DIAGRAM		M1		M1
RATED POWER (KW)		18.5KW		18.5KW
CABLE (SIZE) [mm2]		3x16mm2/N2XY		3x16mm2/N2XY

00	05.01.30	FIRST ISSUED		W/AMRD	FIN/AMRD
Rev.	Date	Revisions description	Prepared	Checked	Approved

FOR REVIEW

Client

Consultant:

شركة ديسكو آف ديولف دي
Golgothar Iron & Steel Development Co.
G.I.S.D.Co

Job nr
Drawing
Revisions

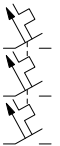
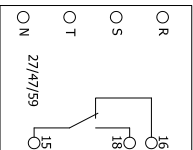
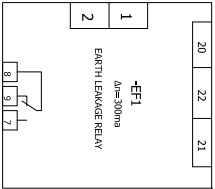
BARSOO
CONSULTING AND PROJECT MANAGEMENT

برسو
شرکت مهندسی

Project Name		Family code/Machine code	
Golgothar Steel Project		J (Fig ¹)	
Title		Scale	
SINGLE LINE AND SCHEMATIC DIAGRAM FOR LV MCC TRANSFER LINE			

Client DWG Number	Revision	Format
S-SM01-D-BOP-WWTP-DWG-EL-001	00	A3
BARSOO DWG Number	Revision	Nr. of sheets
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	Sheet	Follow
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LEGEND	DESCRIPTION
	MCCB/MPCB (3 POLE) WITH ELECTROMAGNETIC RELEASE (OVER CURRENT PROTECTION) AND THERMAL RELEASE EQUIPPED WITH TCS, TRIP COIL AND AUXILIARY RELAY: S1: NC& NO ON/OFF CONTACT Q1 (AS): TRIP CONTACT
	SELECTOR FOR VOLTMETER AND AMPMETER
	RESIDUAL CURRENT CIRCUIT BREAKER
	CURRENT TRANSFORMER
	MINATURE CIRCUIT BREAKER ZPOLE
	AUX. RELAY WITH 4 C/O CONTACT
	HEATER
	THERMOSTAT
	CURRENT TEST TERMINAL
	POTENTIAL TRANSFORMER
	Thermal Overload Relay (Bimetal)

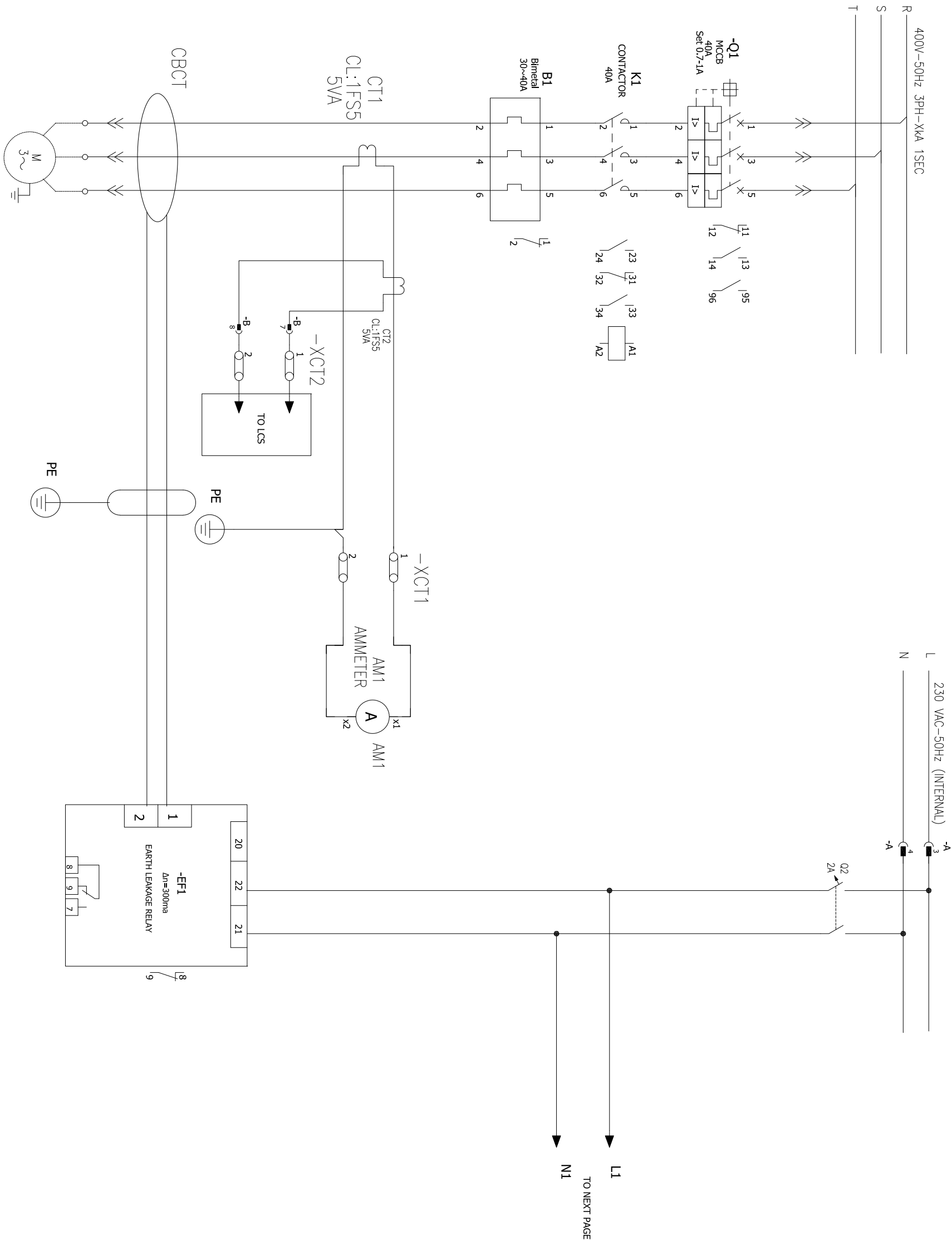
LEGEND	DESCRIPTION
	MINIATURE CIRCUIT BREAKER 3POLE
	CORE BALANCE
	FUSE FOR VOLTAGE TRANSFORMER
	SIGNAL LAMP
	DOOR MICRO SWITCH
	AMMETER
	VOLTMETER
	E.M STOP
	PUSH BUTTON
	SELECTOR SWITCH
	CONTROL PHASE RELAY
	EARTH LEAKAGE RELAY

Rev.	Date	Revision description	Prepared	Checked	Approved
00	05.01.30	FIRST ISSUED	M.HAMAN	F.HANAW	A.HANAW

FOR REVIEW

Client:	شركة قيسية للتطوير العقاري Qeiosiyeh Real Estate Development Co. G.I.S.D.Co	Consultant:	
Contractor and Project Management:	برسكو شركة مشاريع BARSOO CONSULTING AND PROJECT MANAGEMENT	Job no	
		Disclosed from	
		Republishes	

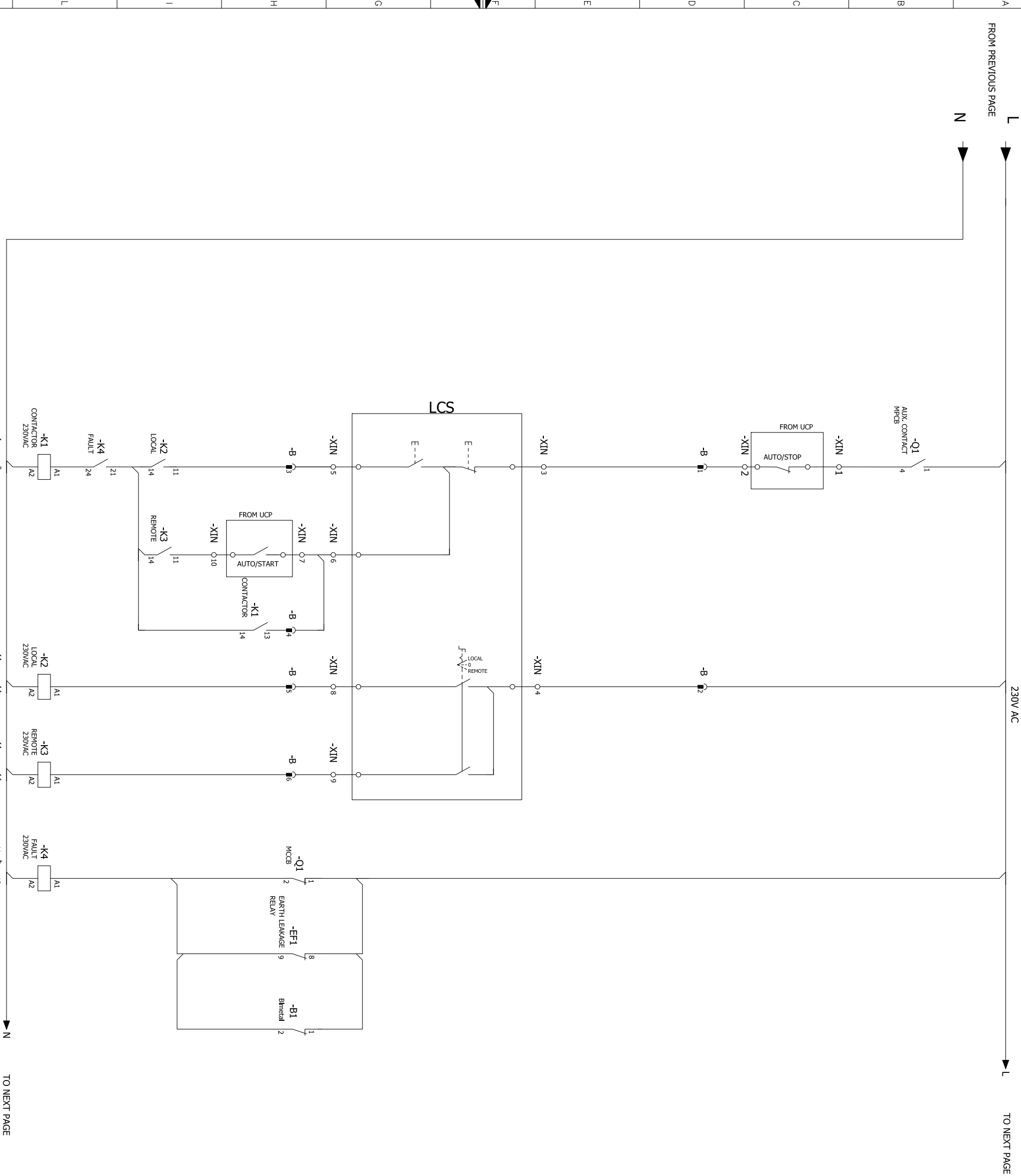
Project Name	Golgothar Steel Project	
	Family code/ Machine code	
Title	Weight (kg)	J (kg/m ³)
SINGLE LINE AND SCHEMATIC DIAGRAM FOR LV MCC TRANSFER LINE 		
Client DWG Number	Revision	Scale
S-SM01-D-BOP-WWTP-DWG-EL-001	00	Format A3
BARSSO DWG Number	Revision	Nr. of sheets
157DEDEG15001	00	5
		Sheet 5 of 8



MOTOR=18.5KW

MOTORS=18.5 kW TYPICAL M1

Client		Consultant:	
شركة ديسكو للبناء والتطوير G.I.S.D.Co		Job no.	
BARSOO CONSULTING AND PROJECT MANAGEMENT		Drawing Prepared	
Project Name		Drawing Checked	
Golgothar Steel Project		Drawing Approved	
Title		Scale	
SINGLE LINE AND SCHEMATIC DIAGRAM FOR LV MCC TRANSFER LINE		Scale	
Client DWG Number		Revision	
S-SM01-D-BOP-WWTP-DWG-EL-001		00	
BARSOO DWG Number		Revision	
157DEDEG15001		00	
Sheet		6 OF 8	
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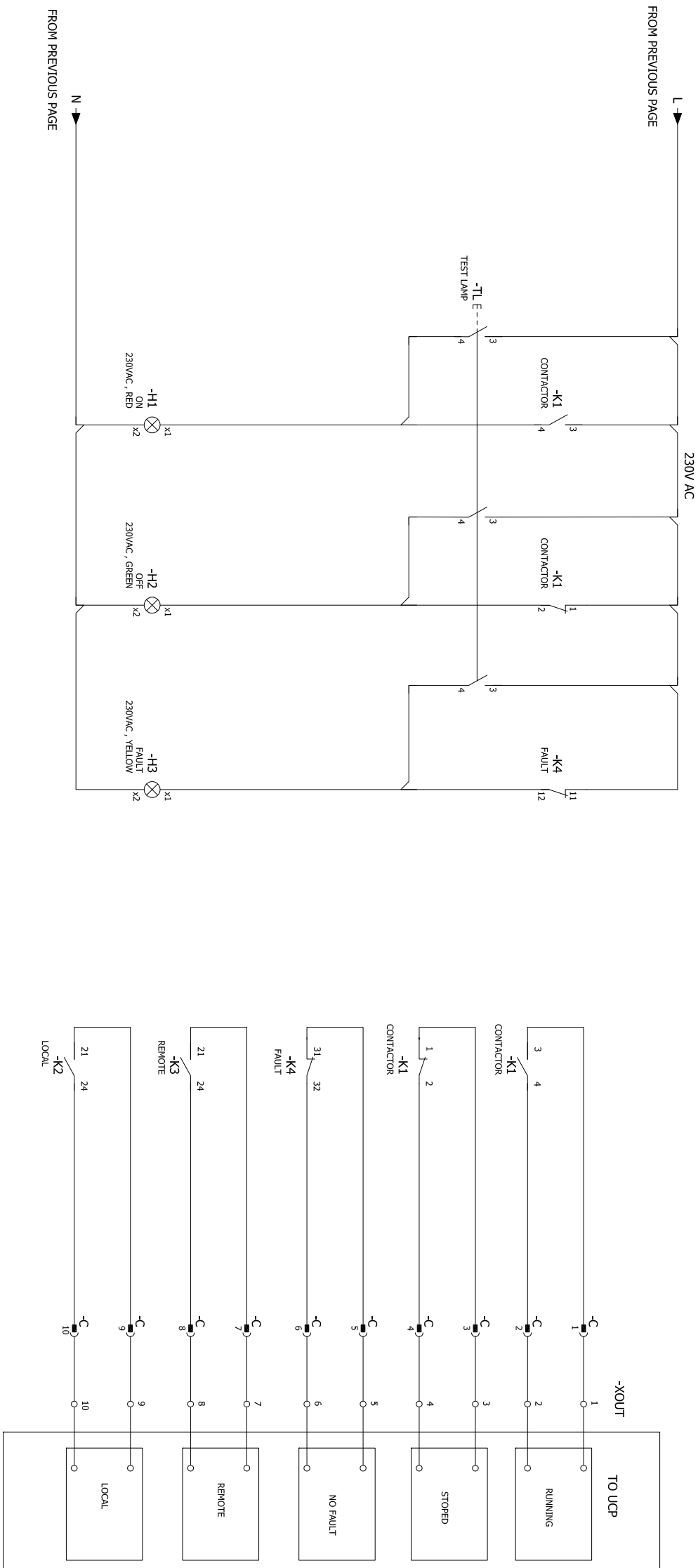


Rev.	Date	Revisions description	PREPARED	CHECKED	APPROVED
00	05.01.30	FIRST ISSUED	MAHMOUD	FAYOUMI	MAHMOUD

FOR REVIEW

Client:	شرکت توسعه انرژی های نو Original Item & Asset Development Co. G.I.S.D.Co
Consultant:	 بر سئو توسعه سیستم های نو
	Job nr Discovered from Replaces

Project Name	Golgohar Steel Project	
	Weight (kg)	J (kgm ³)
SINGLE LINE AND SCHEMATIC DIAGRAM FOR LV MCC TRANSFER LINE 		
Scale		



Rev.	Date	Revision description	Prepared	Checked	Approved
00	05.01.30	FIRST ISSUED	MEHARI	F.MANAW	MONIFRED

FOR REVIEW

Client	شركة جيسكو لبريد إلكتروني Gejisko Iran E-Mail Development Co. G.I.S.D.Co	Correspondents:
بريد إلكتروني جيسكو بريد إلكتروني جيسكو		Job nr Obtained from Replicates

Title		SINGLE LINE AND SCHEMATIC DIAGRAM FOR LV MCC TRANSFER LINE	
Client DWG Number	Revision	Format	
S-SM01-D-BOP-WTTP-DWG-EL-001	00	A3	
BA0500 DWG Number	Revision	Nr. of sheets	
157DEDC15001	00	5	Sheet of Follow