

	نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض خرید پکیج های کمپرسور گاز (رفت و برگشتی) بینک (قرارداد BK-HD-GCS-CO-0008_03)							
	شماره پیمان: 053 - 073 - 9184							
CONTROL PANEL PARTS DATA SHEET/LICENCE LIST/ CERTIFICATES								شماره صفحه : 1 از 11
پروژه	بسته کاری	صادر کننده	تسهیلات	رشته	نوع مدرک	سریال	نسخه	
BK	GCS	HY	120	IN	DS	0005	V06	

طرح نگهداشت و افزایش تولید 27 مخزن

CONTROL PANEL PARTS DATA SHEET/LICENCE LIST/ CERTIFICATES

نگهداشت و افزایش تولید میدان نفتی بینک

V06	Apr. 2025	AFC	Havayar Co.	M.Fakharian	S. Faramarzpour	
V05	Nov. 2024	AFC	Havayar Co.	M.Fakharian	M.SADEGHIAN	
V04	May. 2024	AFC	Havayar Co.	M.Fakharian	S. Faramarzpour	
V03	Feb. 2024	IFR	Havayar Co.	M.Fakharian	S. Faramarzpour	
V02	Oct. 2023	IFR	Havayar Co.	M.Fakharian	S. Faramarzpour	
V01	Aug. 2023	IFR	Havayar Co.	M.Fakharian	M.Mehrshad	
V00	Jun. 2023	IFR	Havayar Co.	M.Fakharian	M.Mehrshad	
Rev.	Date	Purpose of Issue/Status	Prepared by:	Checked by:	Approved by:	CLIENT Approval

Status:

IFA: Issued For Approval
IFR: Issued For Review
IFI: Issued For Information
AFC: Approved For Construction

		نگهداشت و افزایش تولید میدان نفتی بینک سطح الارض و ابنیه تحت الارض خرید پنجه های کمپرسور گازرفت و برگشتی بینک (قرارداد BK-HD-GCS-CO-0008_03)								
شماره پیمان: 053 - 073 - 9184		Project BK	Package GCS	Issuer HY	Facility 120	Dicipline IN	Doc. DS	Sequence 0005	Rev V06	شماره صفحه: 3 از 11
Tag Number										
UCP-2101A UCP-2101B UCP-2101C									UCP Data sheet	
Standards and regulations										
☒ IEC			☒ IPS				☐ RITAL			
Panel data										
Panel type	☐ Rittal brand			☒ Rittal type(Made in Iran)				☐ Rack mounted		
	☐ Plug-in design			☐ Wall/skid Mounted						
Installation	☐ Fixed			☒ Free Standing						
	☒ Indoor (Client control room)			☒ Outdoor under shelter				☐ Outdoor unsheltered		
Color of enclosure	☐ RAL 7032			☒ RAL 7035				☐ Other		
Dimensions	Width	As per Drawing	mm	Height	2100	mm	Depth	800mm		
Body material & size	Material	Sheet Steel	-	Thickness	2	mm				
Door & Top material & size	Material	Sheet Steel	-	Thickness	2	mm				
Cable connection location	☒ Bottom	☐ Top								
Environmental conditions										
Humidity range	☐ 0-10%	☐ 10-30%	☐ 30-50%	☐ 50-60%	☒ 60-70%	☐ 70-80%				
Substation temperature (max)	☐ 25°C	☐ 30°C	☐ 35°C	☒ 43°C	☐ 44°C	☐ 50°C				
Substation temperature (min)	☐ + 1 °C	☒ 0 °C	☐ -20 °C							
Installation altitude above MSL	☐ sea level	☒ ≤1500m	☐ >1000m	☐ >2000m						
Ingress of protection	☐ IP31	☐ IP40	☐ IP41	☐ IP42	☒ IP54	☐ IP65				
Control cabinet heating / cooling	☒ Ventilated			☐ Unventilated						
	☒ Heater & Thermostat			☒ Fan & Filter			☒ Hydrostat	☐ None		
Lighting	☒ Florsant			☒ Microswitch			☒ socket	☐ Other		
Earth	☒ Instrument Earth (IS & NIS)			☒ Electrical Earth						
PLC data										
Brand / type	☒ Siemens			☐ S7- 1200				☐ S7- 300	☒ S7- 400FH	☐ Other
Redundancy	☐ No Redundancy			☒ CPU	☒ Communication			☒ Powersupply	☒ Critical I/O (I/O in ET200M)	
HMI Type	☐ None			☐ TP177A	☐ TP177B			☐ MP-277 # 19"	☒ TP 1500 (15")	
Barrier For Analog (Hart)	☒ Yes			☐ NO						
Note1: Monitoring of machinery will be done by PLC. PLC is high available & high reliability.										
Note 2: As per configuration document , ESD system is really base included in PLC panel.										
Machinery Monitoring										
Rod Drop Sensor Vibration Sensor Key Phasor Temperature Sensor	Montoring of machinery sensor will be done by PLC.									
Trip Relay Center										
Analog sensor VT-PT-TT Analog Sensor RTD(Winding Main motor)	BARIER PHOENIX 1290774 BARIER PHOENIX 2865654		Digital Signal TS-PS		RELAY COUPLE PHOENIX 2986957		Trip Relay Center is back up of PLC. Trip relay center will be activated with PLC failures .			
Soft ware Data for Laptop										
Original license	Yes ☒	No ☐	Original software	Yes ☒	No ☐	Logic source	Yes ☒	No ☐	One Laptop(EWS)One IPC(OWS)	Yes ☒ No ☐
Certificate	SIL Certificate for Barrier & Relay Trip signal									
	Panel IP									
Used Instruments				Communication			Other devices			
no.	Qty.	instrument	Description	☐ None			☒ Control relay			
Quantity of I/O module & detail drawing as per below document: BK-GCS-HY-120-IN-DG-0001 PLC WIRING DIAGRAM & TERMINAL DETAILS BK-GCS-HY-120-IN-DG-0002 CONTROL SYSTEM CABINETS AND CONSOLES LAYOUT DRAWING				☐ PRO-FI Bus module For DCS			☐ Annunciator			
Reference Document: BK-GCS-HY-120-IN-DG-0002 OVERAL CONTROL/SAFETY SYSTEM CONFIGURATION DIAGRAM BK-GCS-HY-120-PR-PI-0001 P&ID Diagram BK-GCS-HY-120-IN-LI-0005 I/O List				☒ Modbus RTU module For DCS			☒ Push button (Compressor Reset,Start & Stop)			
				☒ PLC communication (with hard wire To ESD)			☒ Load Selector switch (0%-25%-50%-75%-100%)			
				☒ PLC communication (with hard wire To DCS)			☐ Indicator light			
				☒ Hard wire for field			☒ Terminal			
				☒ Ethernet to IPC			☒ MCB			
				Note: Some Signals between UCP and DCS/ESD are hard wire.			☒ Emergency stop			
Supply voltage										
Supply feeder :	☐ voltage Transformator			☒ UPS (Redundant divered by client)			☒ Normal (Fan & Lighting)			☐ Other
Voltage power rate for control panel :	☐ 24V DC			☒ 110V AC			☒ 230V AC			☐ Other
Voltage power rate for Instrumentation purposes :	☒ 50 Hz.			☐ 60 Hz.						
	☒ 24V DC			☐ 230V AC			☐ 230V AC			☐ Other
Identification / Wiring / nameplate										
Label & Name plate	☒ Label			☒ Name plate			☒ Wiring tag			
Language	☐ Persian			☒ English			☐ Other			
Insulation material of leads	☒ PVC			☐ Flame retardant						
Gland data for PLC panel										
Material	☒ Brass nickel plated			☐ Brass			☐ thermoplastic			☐ S.S ☐ other
Ingress of protection	☐ EExe ☐ Eexd			☒ IP54			☐ IP66			☐ other
Mechanical protection	☒ Armoured			☐ un-Armoured						





بینک نفتی میدان تولید افزایش و نگهداشت
الارض تحت ابنيه و الارض سطح
خرید پکیج های کنترل سورت و برکتی بینک
(قرارداد 03_0008-GCS-HD-BK)



شماره پیمان

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CONTROL PANEL PARTS DATA SHEET/LICENCE LIST/CERTIFICATE

نسخه	سریال	نوع مدرک	رشته	تسبیلات	مسبارکننده	بسته کاری	پروژه
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ITEM	TAG NO.	DESCRIPTION	MANUFACTURER	ORDER NUMBER	QTY
1	RACK01	SIMATIC S7-400H, rack UR2-H, central and distributed with 2 x 9 slots	SIEMENS	6ES7400-2IA00-0AA0	1
2	PS01, PS02	PS407 POWER SUPPLY,120/230V UC,5V DC/10A	SIEMENS	6ES7407-0KA02-0AA0	2
3	CPU01, CPU02	CPU 414-5H, central processing unit for S7-400H and S7-400F/FH	SIEMENS	6ES7414-5HM06-0AB0	2
4	BAT01, BAT02	BACK-UP BATTERY 3.6V/2.3AH F. PS405/407	SIEMENS	6ES7971-0BA00	4
5	FO01, 02	Patch cable FOC 1 m for synchronization module	SIEMENS	6ES7960-1AA04-5AA0	2
6	SYNC01, 02	S7 SYNC-MOD. V6 F. S7-400H/F/FH	SIEMENS	6ES7960-1AA06-0XA0	4
7	MC01, 02	memory card for S7-400, long design, 5V Flash EPROM, 8 Mbyte	SIEMENS	6ES7952-1KP00-0AA0	2
8	SC01, SC02	Ethernet switch	SIEMENS	6GK5108-0BA00-2AA3	2
9	RACK02, RACK03, RACK04, RACK05	Mounting rail for ET 200M, 530 mm long	SIEMENS	6ES7195-1GF30-0XA0	4
10	A2.2, A2.3, A3.2, A3.3, A4.2, A4.3, A5.2, A5.3	ET200M, IM153-2 Interface Redund.Bundle	SIEMENS	6ES7153-2AR04-0XA0	8
11	A4.4, A4.5, A4.6, A5.4, A5.5, A5.6	SM 336, F-AI 6 X 0/4 ... 20mA HART 20 POLE	SIEMENS	6ES7336-4GE00-0AB0	6
12	A4.7, A4.9, A4.10, A4.11 A5.7, A5.9, A5.10	SM331, 8AI, 0/4-20MA HART 20 POLE	SIEMENS	6ES7331-7TF01-0AB0	7
13	A4.8, A5.8	SM332, 8AO, 0/4 - 20MA HART 20 POLE	SIEMENS	6ES7332-8TF01-0AB0	2
14	A2.4, A3.4	SM326, F-DI 24 X DC24V, failsafe 40 POLE	SIEMENS	6ES7326-1BK02-0AB0	2
15	A2.6, A2.9, A2.10, A3.6, A3.8, A3.9	SM321, 32DI, DC24V 40 POLE	SIEMENS	6ES7321-1BL00-0AA0	6
16	A2.5, A3.5	SM326, F-DO16xDC24V/2A PP, failsafe 40 POLE	SIEMENS	6ES7326-2BF10-0AB0	2
17	A2.7, A2.8, A3.7	SM322, 32DO 24V DC, 0,5A 40 POLE	SIEMENS	6ES7322-1BL00-0AA0	3
18	CP01, CP02	CP 341 Communications processor with RS422/485 interface	SIEMENS	6ES7341-1CH02-0AE0	2
19	D-CP01, 02	MODBUS Master V3.1 single license	SIEMENS	6ES7870-1AA01-0YA1	2
20	F1, F7, F8, F14, F15	2P-10A-AC -Type: C	SIEMENS	5SL6210-7	5
21	F2, F3, F9, F10 F11, F12	2P-2A-AC -Type: C	SIEMENS	5SL6202-7	6
22	F4	2P-4A-AC -Type: C	SIEMENS	5SL6204-7	1
23	F5, F6	2P-16A-AC -Type: C	SIEMENS	5SL6216-7	2
24	F16	2P-20A-DC -TYPE: C	SIEMENS	5SL6220-6	1
25	FC20	Front Connector, 20pin, Screw Cont.	SIEMENS	6ES7392-1AJ00-0AA0	17
26	FC40	Front Connector, 40pin, Screw Cont.	SIEMENS	6ES7392-1AM00-0AA0	13
27	RF	Relay 2PDT 110V	PHOENIX	2910505	1
28	REC	Socket, with light indicator	PHOENIX	804040	1



بینک نفتی میدان تولید افزایش و نگهداشت
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خرید پکیج های کنترل سورت و برگشتی بینک
(قرارداد 03_0008-CO-GCS-HD-BK)



شماره پیمان

053 - 073 – 9184

CONTROL PANEL PARTS DATA SHEET/LICENCE LIST/CERTIFICATE

نسخه	سریال	نوع مدرک	رشته	تسبیلات	همانزکننده	بسته کاری	پروژه
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ITEM	TAG NO.	DESCRIPTION	MANUFACTURER	ORDER NUMBER	QTY
29	X-UPS	Terminal Size 6	PHOENIX	3211814	4
30	X-NUPS	Terminal Size 6+ Earth Terminal Size 6	PHOENIX	3211814 + 3211822	2+1
31	XLIGHT-L	Terminal Size 4	PHOENIX	3211776	4
32	XLIGHT-N	Terminal Size 4	PHOENIX	3211776	4
33	XHT-L	Terminal Size 4	PHOENIX	3211776	2
34	XHT-N	Terminal Size 4	PHOENIX	3211776	2
35	XFAN-L	Terminal Size 4	PHOENIX	3211776	2
36	XFAN-N	Terminal Size 4	PHOENIX	3211776	2
37	XDAO	Diode Terminal Size 2.5	PHOENIX	3210224	4
38	XP-PA	Fuse Terminal Size 2.5	PHOENIX	3211903	5
39	XIM	2Row-Fuse modular terminal block	PHOENIX	3211888	8
40	XAI	2Row-Fuse modular terminal block	PHOENIX	3211888	15
41	XAO	2Row-Fuse modular terminal block	PHOENIX	3211888	2
42	XCP	2Row-Fuse modular terminal block	PHOENIX	3211888	2
43	XHMI	2Row-Fuse modular terminal block	PHOENIX	3211888	1
44	XSC	2Row-Fuse modular terminal block	PHOENIX	3211888	4
45	X-24P	Double-level terminal block	PHOENIX	1037087	5
46	X-24N	Double-level terminal block	PHOENIX	1037087	5
47	XP-BR	2Row-Fuse modular terminal block	PHOENIX	3211888	64
48	VM01...VM02	Displacement Input Thrust Signal Conditioner	SHINKAWA	VM-21T1-22C02-1	2
49	VM03	Key Phasor Conditioner	SHINKAWA	VM-21R1-99001D2-1	1
50	VM-Spare	D TERMINAL NO. 2.5	PHOENIX	1037087	4
51	BR7~BR12, BR19~BR24 BR28~BR38	Ex i repeater power supply - ZONE2, IIB, T4-SIL2	PHONEIX	2865366	23
52	BR15~BR18	MACX MCR-EX-SL-RPSSI-2I Repeater power supply - ZONE2, IIB, T4-SIL2	PHOENIX	2865654	4
53	BR39~BR40	MACX MCR-EX-ID5-I-I Output signal conditioner - ZONE2, IIB, T4-SIL3	PHOENIX	2908060	2
54	BR41~BR56	MACX MCR-EX-SL-RPSS-2I-2I Repeater power supply - ZONE2, IIB, T4-SIL3	PHOENIX	2865382	16
55	BR57~BR60	MTL5531 VIBRATION TRANSDUCER INTERFACE - ZONE2, IIB, T4-SIL2	MTL	MTL5531	4
56	BR01~BR06, BR13~BR14, BR25~BR27	MACX MCR-EX-AP-RPSS-I-IR Power/input isolating amplifier - ZONE2, IIB, T4-SIL2	PHOENIX	1290774	11



بینک نفتی میدان تولید افزایش و نگهداشت
الأرض تحت البنية والأرض سطح
خرید پکیج های کمپرسور روت و برگشتی بینک
(قرارداد: BK-HD-GCS-CO-0008_03)



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CONTROL PANEL PARTS DATA SHEET LICENCE LIST / CERTIFICATE

نسخه	سریال	نوع مدارک	رشته	تجهیزات	مسئول کننده	پسته کاری	پروژه
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شماره صفحه

ITEM	TAG NO.	DESCRIPTION	MANUFACTURER	ORDER NUMBER	QTY
57	---	Phoenix Cable Programing Adapter	PHOENIX	2811271	1
58	XA1	IS KNIFE TERMINAL BLUE NO. 2.5	PHOENIX	3211650	24
59	XA2	IS KNIFE TERMINAL BLUE NO. 2.5	PHOENIX	3211650	21
60	XA3	IS KNIFE TERMINAL BLUE NO. 2.5	PHOENIX	3211650	38
61	XA4	IS KNIFE TERMINAL BLUE NO. 2.5	PHOENIX	3211650	24
62	XA5	IS KNIFE TERMINAL BLUE NO. 2.5	PHOENIX	3211650	2
63	XA6	IS KNIFE TERMINAL BLUE NO. 2.5	PHOENIX	3211650	21
64	XA-1A	IS KNIFE TERMINAL BLUE NO. 2.5	PHOENIX	3211650	38
65	X-24P-C2	Double-level terminal block	PHOENIX	1037087	10
66	X-24M-C2	Double-level terminal block	PHOENIX	1037087	10
67	XDI	2Row-Fuse modular terminal block	PHOENIX	3211888	4
68	XDO	2Row-Fuse modular terminal block	PHOENIX	3211888	20
69	XDI-M	Feed-through terminal block	PHOENIX	3246010	8
70	XP-RC	2Row-Fuse modular terminal block	PHOENIX	3211903	10
71	XP-RB	2Row-Fuse modular terminal block	PHOENIX	3211903	11
72	XP-DIF	2Row-Fuse modular terminal block	PHOENIX	3211903	10
73	RF1~RF7	PSR-SPP- 24DC/FSP/2X1/1X2- Coupling relay- SIL 3	PHONEIX	2986957	7
74	RCO1~RCO3	PSR-SPP- 24DC/FSP/2X1/1X2- Coupling relay- SIL 3	PHONEIX	2986957	3
75	Relay IRP (RI1~18)	RELAY 1PDT	PHONEIX	2966171	18
76	RCI1~RCI10	PSR-SPP- 24DC/FSP/2X1/1X2- Coupling relay- SIL 3	PHONEIX	2986957	10
77	XDI1	2Row-Fuse modular terminal block	PHOENIX	3211888	6
78	XDI2	2Row-Fuse modular terminal block	PHOENIX	3211888	7
79	XDI3	2Row-Fuse modular terminal block	PHOENIX	3211888	9
80	XDI4	2Row-Fuse modular terminal block	PHOENIX	3211888	19
81	XDI5	2Row-Fuse modular terminal block	PHOENIX	3211888	19
82	XDI6	2Row-Fuse modular terminal block	PHOENIX	3211888	18
83	XDI7	2Row-Fuse modular terminal block	PHOENIX	3211888	9
84	XDI8	2Row-Fuse modular terminal block	PHOENIX	3211888	2

ITEM	TAG NO.	DESCRIPTION	MANUFACTURER	ORDER NUMBER	QTY
85	XDO1	2Row-Fuse modular terminal block	PHOENIX	3211888	5
86	XDO1-1	2Row-Fuse modular terminal block	PHOENIX	3211888	2
87	XDO2	2Row-Fuse modular terminal block	PHOENIX	3211888	6
88	XD03	2Row-Fuse modular terminal block	PHOENIX	3211888	19
89	2101X1	2Row-Fuse modular terminal block	PHOENIX	3211888	12
90	2101X2	2Row-Fuse modular terminal block	PHOENIX	3211888	12
91	2101X3	2Row-Fuse modular terminal block	PHOENIX	3211888	12
92	2101X4	2Row-Fuse modular terminal block	PHOENIX	3211888	12
93	2101X5	2Row-Fuse modular terminal block	PHOENIX	3211888	4
94	2101X6	2Row-Fuse modular terminal block	PHOENIX	3211888	12
95	XA-M-1	UT 2,5-3L	PHOENIX	3214259	3

ITEM	TAG NO.	DESCRIPTION	MANUFACTURER	ORDER NUMBER	QTY
1	FAN1,2	110VAC FAN	RITALL	SK 3240.110	2
2	FILTER	250*250 RAL7035	RITTAL	SK 3240.110	2
3	H1,...H4	LIGHTING 230V	RITTAL	SZ 2500.110	4
4	HT01-02	HEATER 230V 60W	RITTAL	SK 3105.370	3
5	TH01/02	TERMOSTAT FAN	RITTAL	SK 3110.000	3
6	HY01-02	HYGROSTAT	RITTAL	SK 3118.000	3
7	S1,...S4	DOOR MICRO SWITCH	Schneider	XCKN2110P20	6
8	TH01	Thermostat	RITTAL	SK 3110.000	1
9	HY01	Hygrostat	RITTAL	SK 3118.000	1

ITEM	TAG NO.	DESCRIPTION	MANUFACTURER	ORDER NUMBER	QTY
1	HMI	SIMATIC HMI TP1500 Comfort	SIEMENS	6AV2124-0QC02-0AX2	1
2	EST2231A	EMERGENCY-STOP	SCHNEIDER	XB4BS8442	1
3	HSL2242	SELECTOR LOAD	SCHNEIDER	K1E005NLH	1
4	HSR2244A	RESET	SCHNEIDER	XB4BA21	1
5	HST2243	START	SCHNEIDER	XB4BA31	1
6	HSP2243	STOP	SCHNEIDER	XB4BA42	1

BOM OF COMMON IPC & LAPTOP FOR THREE TRAINS				
ITEM	TAG NO.	DESCRIPTION	MANUFACTURER	QTY
1	IPC-01	Industrial PC, Core i7, Ram 16Gb, SSD500Gb, DVD R/RW, PS230Vac, CP1623, Original Windows10, Monitor24", Industrial Keyboard & Mouse	Advantech	1
2	Laptop	Industrial Rugged Laptop, Core i7, Ram 8Gb, SSD500Gb, LCD 15.6"	Getac	1



شماره پیمان

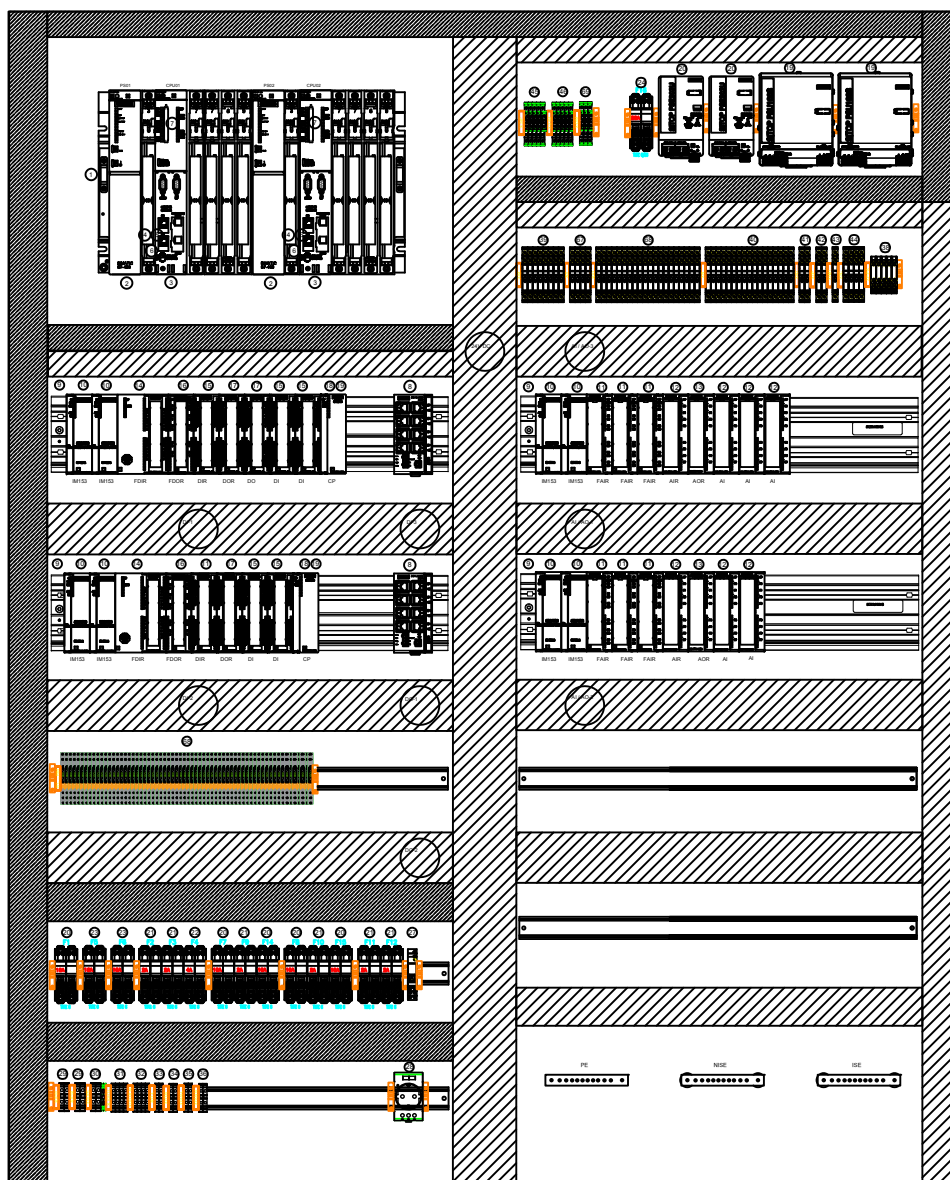
053 - 073 - 9184

CONTROL PANEL PARTS DATA SHEET/LICENCE LIST/CERTIFICATE

پروژه	بسته کاری	مسئول کننده	تجهیزات	رشته	نوع مدارک	سریال	نسخه
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شماره پیمان

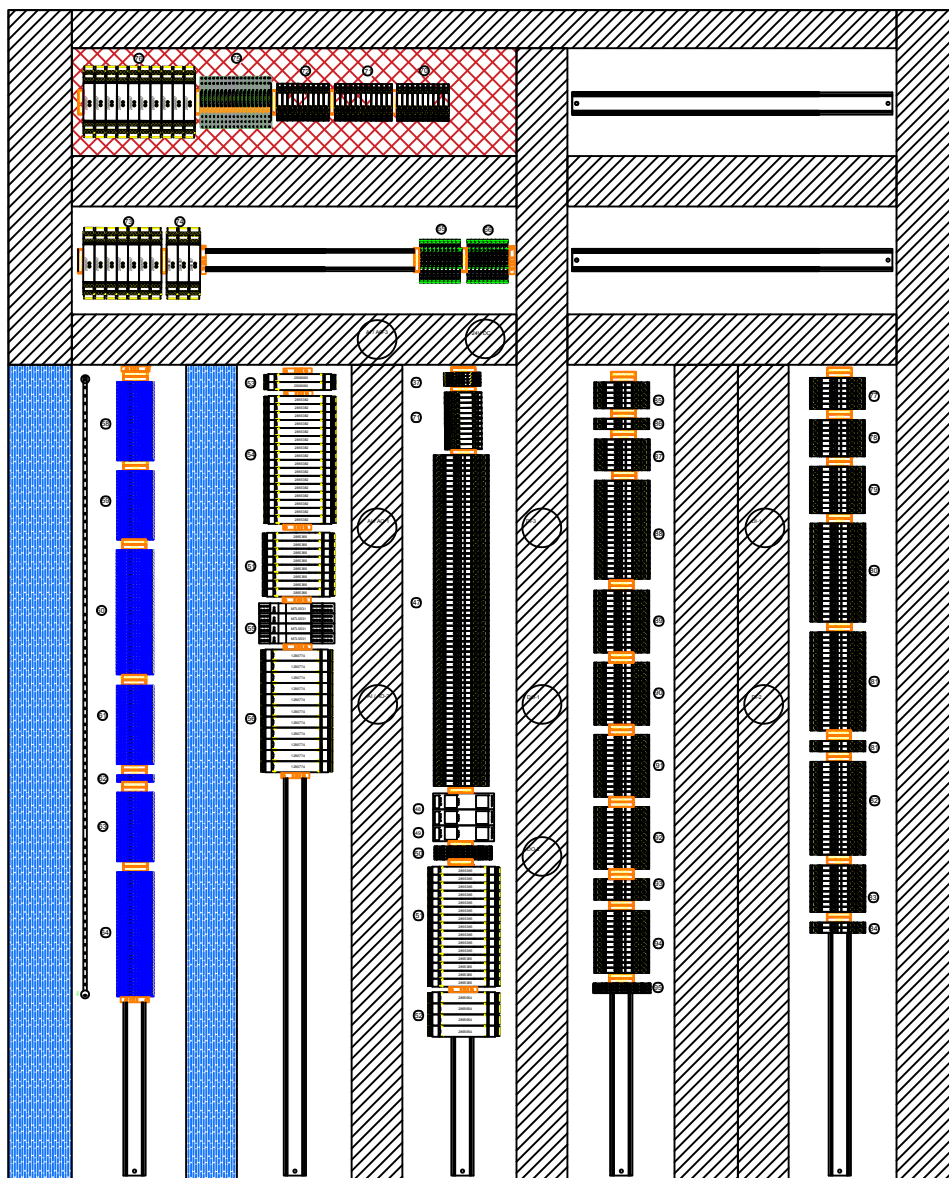
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CONTROL PANEL PARTS DATA SHEET LICENCE LIST / CERTIFICATE

پروژه	بسته کاری	مستأجرکننده	تجهیزات	رشته	نوع مدارک	سرویس	نسخه
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CONTROL PANEL PARTS DATA SHEET LICENCE LIST / CERTIFICATE

پروژه	پسته کاری	مسار کننده	تسهیلات	رشته	نوع مدارک	سریال	نسخه
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