



Toase-e Park Sanati Gohar Ofogh  
Petrochemical Co.  
**CONCEPTUAL, BASIC and DETAIL DESIGN  
ENGINEERING OF STYRENE PARK OFFSITE**



Document Title: Instrument Cable List

Document No.:

Rev. R00

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# STYRENE PARK OFFSITE

**Document Title:**  
**Instrument Cable List**

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<b>Rev.</b>	<b>Issued Date</b>	<b>DESCRIPTION</b>	<b>PREPARED</b>	<b>CHECKED</b>	<b>APPROVED</b>



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**REVISION RECORD SHEET**

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	R0	R1	R2	R3	R4	R5	R6		R0	R1	R2	R3	R4	R5	R6
1	X	X						41							
2	X	X						42							
3	X	X						43							
4	X	X						44							
5		X						45							
6		X						46							
7		X						47							
8		X						48							
9		X						49							
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COMPRESSOR RU0001A/B-C-01

No.	Service	Tag No.	Content of signal	SIGNAL Type	IS/NIS	Cable type	Cable size	Gland size	Cable Tag.	From	To	Length (Meter)	Remarks
1	Compressor Suction pressure transmitter	PIT-RU0001A-01	4 to 20mA / 2-wire	Analogue	IS	Type 1	01Px1.5mm <sup>2</sup>	M20	PIT-RU0001A-01	PIT-RU0001A-01	JBD-A-RU0001A-01	10	
2	Discharge pressure transmitter	PIT-RU0001A-03	4 to 20mA / 2-wire	Analogue	IS	Type 1	01Px1.5mm <sup>2</sup>	M20	PIT-RU0001A-03	PIT-RU0001A-03	JBD-A-RU0001A-01	10	
3	Oil header Compressor pressure transmitter	PIT-RU0001A-02	4 to 20mA / 2-wire	Analogue	IS	Type 1	01Px1.5mm <sup>2</sup>	M20	PIT-RU0001A-02	PIT-RU0001A-02	JBD-A-RU0001A-01	10	
4	Upstream oil filter pressure transmitter	PIT-RU0001A-05	4 to 20mA / 2-wire	Analogue	IS	Type 1	01Px1.5mm <sup>2</sup>	M20	PIT-RU0001A-05	PIT-RU0001A-05	JBD-A-RU0001A-01	10	
5	Downstream oil filter pressure transmitter	PIT-RU0001A-06	4 to 20mA / 2-wire	Analogue	IS	Type 1	01Px1.5mm <sup>2</sup>	M20	PIT-RU0001A-06	PIT-RU0001A-06	JBD-A-RU0001A-01	10	
6	Pressure transmitter oil separator	PIT-RU0001A-04	4 to 20mA / 2-wire	Analogue	IS	Type 1	01Px1.5mm <sup>2</sup>	M20	PIT-RU0001A-04	PIT-RU0001A-04	JBD-A-RU0001A-01	10	
7	Compressor Suction temperature transmitter	TIT-RU0001A-01	4 to 20mA / 2-wire	Analogue	IS	Type 1	01Px1.5mm <sup>2</sup>	M20	TIT-RU0001A-01	TIT-RU0001A-01	JBD-A-RU0001A-01	10	
8	Oil Separator temperature transmitter	TIT-RU0001A-03	4 to 20mA / 2-wire	Analogue	IS	Type 1	01Px1.5mm <sup>2</sup>	M20	TIT-RU0001A-03	TIT-RU0001A-03	JBD-A-RU0001A-01	10	
9	Oil header compressor temperature transmitter	TIT-RU0001A-02	4 to 20mA / 2-wire	Analogue	IS	Type 1	01Px1.5mm <sup>2</sup>	M20	TIT-RU0001A-02	TIT-RU0001A-02	JBD-A-RU0001A-01	10	
10	Compressor slide valve position sensor	ZE-RU0001A-01	3-wire	Analogue	IS	Type 1	01Px1.5mm <sup>2</sup>	M20	ZE-RU0001A-01	ZE-RU0001A-01	JBD-A-RU0001A-01	10	
11	Multi cable for JBD-A-RU0001A-01				IS	(CU/XLPE/PVC/S WA/PVC) Blue	15x2x1 mm <sup>2</sup>	M32	JBD-A-RU0001A-01-UCP	JBD-A-RU0001A-01	UCP-RU0001	400 m	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
12	Chiller level transmitter	LIT-RU0001A-01	4 to 20mA / 2-wire	Analogue	IS	Type 1	01Px1.5mm <sup>2</sup>	M20	LIT-RU0001A-01	LIT-RU0001A-01	JBD-A-RU0001A-03	10	
13	Chiller level control valve	LV-RU0001A-01	4 to 20mA / 2-wire	Analogue	IS	Type 1	01Px1.5mm <sup>2</sup>	M20	LV-RU0001A-01	LV-RU0001A-01	JBD-A-RU0001A-03	10	
14	Multi cable for JBD-A-RU0001A-03				IS	(CU/XLPE/PVC/S WA/PVC) Blue	10x2x1 mm <sup>2</sup>	M25	JBD-A-RU0001A-03-UCP	JBD-A-RU0001A-03	UCP-RU0001	400 m	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
15	Motor Winding U1 temperature element	PTC-RU0001A-13	PTC / 2 wire	PTC									
16	Motor Winding U2 temperature element	PTC-RU0001A-14	PTC / 2 wire	PTC									
17	Motor Winding V1 temperature element	PTC-RU0001A-15	PTC / 2 wire	PTC									
18	Multi cable for COMP A. MAIN MOTOR PTC					(CU/XLPE/PVC/S WA/PVC) Gray	3x2x1.5 mm <sup>2</sup>	M20	RU0001A-M-01-MCC	RU0001A-M-01	MCC	200 m	1-Cable and Gland will be supplied By Customer 2-Selected Cable shall be suitable for M20 Gland 3-Cable size shall be checked and confirmed by Customer
19	Oil separator level switch	LS-RU0001A-01	24Vdc / **W	Digital	NIS	Type3	02Px1.5mm <sup>2</sup>	M20	LS-RU0001A-01	LS-RU0001A-01	JBD-A-RU0001A-02	10	
20	Compressor capacity load Return solenoid valve	SOV-RU0001A-01D	24Vdc / **W	Digital	NIS	Type 2	01Px2.5mm <sup>2</sup>	M20	SOV-RU0001A-01D	SOV-RU0001A-01D	JBD-A-RU0001A-02	10	
21	Compressor capacity unload supply solenoid valve	SOV-RU0001A-01A	24Vdc / **W	Digital	NIS	Type 2	01Px2.5mm <sup>2</sup>	M20	SOV-RU0001A-01A	SOV-RU0001A-01A	JBD-A-RU0001A-02	10	
22	Compressor capacity load supply solenoid valve	SOV-RU0001A-01C	24Vdc / **W	Digital	NIS	Type 2	01Px2.5mm <sup>2</sup>	M20	SOV-RU0001A-01C	SOV-RU0001A-01C	JBD-A-RU0001A-02	10	
23	Compressor capacity unload Return solenoid valve	SOV-RU0001A-01E	24Vdc / **W	Digital	NIS	Type 2	01Px2.5mm <sup>2</sup>	M20	SOV-RU0001A-01E	SOV-RU0001A-01E	JBD-A-RU0001A-02	10	
24	Multi cable for JBD-A-RU0001A-02		24Vdc / **W	Digital	NIS	(CU/XLPE/PVC/S WA/PVC) Gray	12x2.5 mm <sup>2</sup>	M32	JBD-A-RU0001A-02-UCP	JBD-A-RU0001A-02	UCP	400 m	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
25													
26	Hot gas solenoid valve	SOV-RU0001A-03	24Vdc / **W	Digital	NIS	Type 2	01Px2.5mm <sup>2</sup>	M20	SOV-RU0001A-03	SOV-RU0001A-03	JBD-A-RU0001A-04	10	
27	Evaporator oil drain line.	SOV-RU0001A-02	24Vdc / **W	Digital	NIS	Type 2	01Px2.5mm <sup>2</sup>	M20	SOV-RU0001A-02	SOV-RU0001A-02	JBD-A-RU0001A-04	10	
28	Air Cooler motor 2 vibration switch	VS-RU0001A-01A	24Vdc / **D	Digital	NIS	Type 2	01Px2.5mm <sup>2</sup>	M20	VS-RU0001A-01A	VS-RU0001A-01A	JBD-A-RU0001A-04	10	
29	Air Cooler motor 3 vibration switch	VS-RU0001A-01B	24Vdc / **D	Digital	NIS	Type 2	01Px2.5mm <sup>2</sup>	M20	VS-RU0001A-01B	VS-RU0001A-01B	JBD-A-RU0001A-04	10	
30	Multi cable for JBD-A-RU0001A-04		24Vdc / **D**W	Digital	NIS	(CU/XLPE/PVC/S WA/PVC) Gray	12x2.5 mm <sup>2</sup>	M32	JBD-A-RU0001A-04-UCP	JBD-A-RU0001A-04	UCP	400 m	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer

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**COMPRESSOR RU0001A/B-C-01**

No.	Service	Tag No.	Content of signal	SIGNAL Type	IS/NIS	Cable type	Cable size	Gland size	Cable Tag.	From	To	Length (Meter)	Remarks
31	Oil heater temp. control switch	TS-RU0001A-01A	24Vdc / **D	Digital	NIS								
32	Oil heater Surface and box temp. control switch	TS-RU0001A-01B	24Vdc / **D	Digital	NIS								
33	Multi cable for TS-RU0001A-01		24Vdc / **D	Digital	NIS	(CU/XLPE/PVC/S WA/PVC) Gray	04Cx1.5mm <sup>2</sup>	M20	TS-RU0001A-01-UCP	RU0001A-H-01	UCP	400 m	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
34	LCP Switches		24Vdc / **D	Digital	NIS	(CU/XLPE/PVC/S WA/PVC) Gray	12Cx1.5 mm <sup>2</sup>	M25	RU0001A-LCP-01-UCP	RU0001A-LCP-01	UCP	400 m	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
35	LCP Switches		24Vdc / **D	Digital	NIS	(CU/XLPE/PVC/S WA/PVC) Gray	12Cx1.5 mm <sup>2</sup>	M25	RU0001A-LCP-01-UCP	RU0001A-LCP-01	UCP	400 m	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
36	LCP Switches		24Vdc / **D	Digital	NIS	(CU/XLPE/PVC/S WA/PVC) Gray	12Cx1.5 mm <sup>2</sup>	M25	RU0001A-LCP-01-UCP	RU0001A-LCP-01	UCP	400 m	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
37	LCP Lamps		24Vdc / **D	Digital	NIS	(CU/XLPE/PVC/S WA/PVC) Gray	12Cx2.5 mm <sup>2</sup>	M32	RU0001A-LCP-01-UCP	RU0001A-LCP-01	UCP	400 m	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
38	UCP to MCC (UCP Digital Output Command signals for main motor,oil pump, condenser :STT,STP, ETC)		24Vdc / **D	Digital	NIS	(CU/XLPE/PVC/S WA/PVC) Gray	15x2x1 mm <sup>2</sup>	M32	Hold	RU0001A	MCC	400 m	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
39	MCC to UCP (UCP Digital Input Status signals for main motor,oil pump, condenser : Running,Fault, ETC)		24Vdc / **D	Digital	NIS	(CU/XLPE/PVC/S WA/PVC) Gray	15x2x1 mm <sup>2</sup>	M32	Hold	MCC	RU0001A	400 m	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
40	UCP to MCC (UCP Digital Output Command signals for VFD condenser :STT,STP, ETC)		24Vdc / **D	Digital	NIS	(CU/XLPE/PVC/S WA/PVC) Gray	10x2x1 mm <sup>2</sup>	M25	Hold	RU0001A	MCC	400 m	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
41	MCC to UCP (UCP Digital Input Status signals for VFD condenser : Running,Fault, ETC)		24Vdc / **D	Digital	NIS	(CU/XLPE/PVC/S WA/PVC) Gray	10x2x1 mm <sup>2</sup>	M25	Hold	MCC	RU0001A	400 m	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
42	UCP to MCC (Analog signals for VFD condenser, Main motor current )		4 to 20mA / 2-wire	Analouge	NIS	(CU/XLPE/PVC/S WA/PVC) Gray	02Px1 mm <sup>2</sup>	M20	Hold	RU0001A	MCC	400 m	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
43	Communication with DCS			serial		Ethernet cable			Hold	UCP	DCS	400 m	
44	ESD TRIP Signal	RU0001A-ESD-01	24Vdc / **D	Digital	NIS		01Px2.5mm <sup>2</sup>		Hold	RU0001A-ESD-01	UCP	400 m	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
45	UPS Power			Power cable		CU/XLPE/PVC (600/1000) Black	02Cx4mm <sup>2</sup>		UPS-RU0001A-1	Instrument PDP	UCP	400 m	By Customer
46	Non-UPS Power			Power cable		CU/XLPE/PVC (600/1000) Black	02Cx4mm <sup>2</sup>		NUPS-RU0001A-1	Instrument PDP	UCP	400 m	By Customer



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**COMPRESSOR RU0001B-C-01**

No.	Service	Tag No.	Content of signal	SIGNAL Type	IS/NIS	Cable type	Cable size	Gland size	Cable Tag.	From	To	Length (Meter)	Remarks
1	Compressor Suction pressure transmitter	PIT-RU0001B-01	4 to 20mA / 2-wire	Analogue	IS	Type 1	01Px1.5mm <sup>2</sup>	M20	PIT-RU0001B-01	PIT-RU0001B-01	JBD-A-RU0001B-01	10	
2	Discharge pressure transmitter	PIT-RU0001B-03	4 to 20mA / 2-wire	Analogue	IS	Type 1	01Px1.5mm <sup>2</sup>	M20	PIT-RU0001B-03	PIT-RU0001B-03	JBD-A-RU0001B-01	10	
3	Oil header Compressor pressure transmitter	PIT-RU0001B-02	4 to 20mA / 2-wire	Analogue	IS	Type 1	01Px1.5mm <sup>2</sup>	M20	PIT-RU0001B-02	PIT-RU0001B-02	JBD-A-RU0001B-01	10	
4	Upstream oil filter pressure transmitter	PIT-RU0001B-05	4 to 20mA / 2-wire	Analogue	IS	Type 1	01Px1.5mm <sup>2</sup>	M20	PIT-RU0001B-05	PIT-RU0001B-05	JBD-A-RU0001B-01	10	
5	Downstream oil filter pressure transmitter	PIT-RU0001B-06	4 to 20mA / 2-wire	Analogue	IS	Type 1	01Px1.5mm <sup>2</sup>	M20	PIT-RU0001B-06	PIT-RU0001B-06	JBD-A-RU0001B-01	10	
6	Pressure transmitter oil separator	PIT-RU0001B-04	4 to 20mA / 2-wire	Analogue	IS	Type 1	01Px1.5mm <sup>2</sup>	M20	PIT-RU0001B-04	PIT-RU0001B-04	JBD-A-RU0001B-01	10	
7	Compressor Suction temperature transmitter	TIT-RU0001B-01	4 to 20mA / 2-wire	Analogue	IS	Type 1	01Px1.5mm <sup>2</sup>	M20	TIT-RU0001B-01	TIT-RU0001B-01	JBD-A-RU0001B-01	10	
8	Oil Separator temperature transmitter	TIT-RU0001B-03	4 to 20mA / 2-wire	Analogue	IS	Type 1	01Px1.5mm <sup>2</sup>	M20	TIT-RU0001B-03	TIT-RU0001B-03	JBD-A-RU0001B-01	10	
9	Oil header compressor temperature transmitter	TIT-RU0001B-02	4 to 20mA / 2-wire	Analogue	IS	Type 1	01Px1.5mm <sup>2</sup>	M20	TIT-RU0001B-02	TIT-RU0001B-02	JBD-A-RU0001B-01	10	
10	Compressor slide valve position sensor	ZE-RU0001B-01	3-wire	Analogue	IS	Type 1	01Px1.5mm <sup>2</sup>	M20	ZE-RU0001B-01	ZE-RU0001B-01	JBD-A-RU0001B-01	10	
11	Multi cable for JBD-A-RU0001B-01				IS	(CU/XLPE/PVC/SWA/PVC) Blue	15x2x1 mm <sup>2</sup>	M32	JBD-A-RU0001B-01-UCP	JBD-A-RU0001B-01	UCP-RU0001	400	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
12	Chiller level transmitter	LIT-RU0001B-01	4 to 20mA / 2-wire	Analogue	IS	Type 1	01Px1.5mm <sup>2</sup>	M20	LIT-RU0001B-01	LIT-RU0001B-01	JBD-A-RU0001B-03	10	
13	Chiller level control valve	LV-RU0001B-01	4 to 20mA / 2-wire	Analogue	IS	Type 1	01Px1.5mm <sup>2</sup>	M20	LV-RU0001B-01	LV-RU0001B-01	JBD-A-RU0001B-03	10	
14	Multi cable for JBD-A-RU0001B-03				IS	(CU/XLPE/PVC/SWA/PVC) Blue	10x2x1 mm <sup>2</sup>	M25	JBD-A-RU0001B-03-UCP	JBD-A-RU0001B-03	UCP-RU0001	400	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
15	Motor Winding U1 temperature element	PTC-RU0001B-13	PTC / 2 wire	PTC									
16	Motor Winding U2 temperature element	PTC-RU0001B-14	PTC / 2 wire	PTC									
17	Motor Winding V1 temperature element	PTC-RU0001B-15	PTC / 2 wire	PTC									
18	Multi cable for COMP A. MAIN MOTOR PTC					(CU/XLPE/PVC/SWA/PVC) Gray	3x2x1.5 mm <sup>2</sup>	M20	RU0001B-M-01-MCC	RU0001B-M-01	MCC	200	1-Cable and Gland will be supplied By Customer 2-Selected Cable shall be suitable for M20 Gland 3-Cable size shall be checked and confirmed by Customer
19	Oil separator level switch	LS-RU0001B-01	24Vdc / **W	Digital	NIS	Type3	02Px1.5mm <sup>2</sup>	M20	LS-RU0001B-01	LS-RU0001B-01	JBD-A-RU0001B-02	10	
20	Compressor capacity load Return solenoid valve	SOV-RU0001B-01D	24Vdc / **W	Digital	NIS	Type 2	01Px2.5mm <sup>2</sup>	M20	SOV-RU0001B-01D	SOV-RU0001B-01D	JBD-A-RU0001B-02	10	
21	Compressor capacity unload supply solenoid valve	SOV-RU0001B-01A	24Vdc / **W	Digital	NIS	Type 2	01Px2.5mm <sup>2</sup>	M20	SOV-RU0001B-01A	SOV-RU0001B-01A	JBD-A-RU0001B-02	10	
22	Compressor capacity load supply solenoid valve	SOV-RU0001B-01C	24Vdc / **W	Digital	NIS	Type 2	01Px2.5mm <sup>2</sup>	M20	SOV-RU0001B-01C	SOV-RU0001B-01C	JBD-A-RU0001B-02	10	
23	Compressor capacity unload Return solenoid valve	SOV-RU0001B-01E	24Vdc / **W	Digital	NIS	Type 2	01Px2.5mm <sup>2</sup>	M20	SOV-RU0001B-01E	SOV-RU0001B-01E	JBD-A-RU0001B-02	10	
24	Multi cable for JBD-A-RU0001B-02		24Vdc / **W	Digital	NIS	(CU/XLPE/PVC/SWA/PVC) Gray	12x2.5 mm <sup>2</sup>	M32	JBD-A-RU0001B-02-UCP	JBD-A-RU0001B-02	UCP	400	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
25													
26	Hot gas solenoid valve	SOV-RU0001B-03	24Vdc / **W	Digital	NIS	Type 2	01Px2.5mm <sup>2</sup>	M20	SOV-RU0001B-03	SOV-RU0001B-03	JBD-A-RU0001B-04	10	
27	Evaporator oil drain line.	SOV-RU0001B-02	24Vdc / **W	Digital	NIS	Type 2	01Px2.5mm <sup>2</sup>	M20	SOV-RU0001B-02	SOV-RU0001B-02	JBD-A-RU0001B-04	10	
28	Air Cooler motor 2 vibration switch	VS-RU0001B-01A	24Vdc / **D	Digital	NIS	Type 2	01Px2.5mm <sup>2</sup>	M20	VS-RU0001B-01A	VS-RU0001B-01A	JBD-A-RU0001B-04	10	



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**COMPRESSOR RU0001B-C-01**

No.	Service	Tag No.	Content of signal	SIGNAL Type	IS/NIS	Cable type	Cable size	Gland size	Cable Tag.	From	To	Length (Meter)	Remarks
29	Air Cooler motor 3 vibration switch	VS-RU0001B-01B	24Vdc / **D	Digital	NIS	Type 2	01Px2.5mm <sup>2</sup>	M20	VS-RU0001B-01B	VS-RU0001B-01B	JBD-A-RU0001B-04	10	
30	Multi cable for JBD-A-RU0001B-04		24Vdc / **D**W	Digital	NIS	(CU/XLPE/PVC/SWA/P VC) Gray	12x2.5 mm <sup>2</sup>	M32	JBD-A-RU0001B-04-UCP	JBD-A-RU0001B-04	UCP	400	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
31	Oil heater temp. control switch	TS-RU0001B-01A	24Vdc / **D	Digital	NIS								
32	Oil heater Surface and box temp. control switch	TS-RU0001B-01B	24Vdc / **D	Digital	NIS								
33	Multi cable for TS-RU0001B-01		24Vdc / **D	Digital	NIS	(CU/XLPE/PVC/SWA/P VC) Gray	04Cx1.5mm <sup>2</sup>	M20	TS-RU0001B-01-UCP	RU0001B-H-01	UCP	400	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
34	LCP Switches		24Vdc / **D	Digital	NIS	(CU/XLPE/PVC/SWA/P VC) Gray	12Cx1.5 mm <sup>2</sup>	M25	RU0001B-LCP-01-UCP	RU0001B-LCP-01	UCP	400	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
35	LCP Switches		24Vdc / **D	Digital	NIS	(CU/XLPE/PVC/SWA/P VC) Gray	12Cx1.5 mm <sup>2</sup>	M25	RU0001B-LCP-01-UCP	RU0001B-LCP-01	UCP	400	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
36	LCP Switches		24Vdc / **D	Digital	NIS	(CU/XLPE/PVC/SWA/P VC) Gray	12Cx1.5 mm <sup>2</sup>	M25	RU0001B-LCP-01-UCP	RU0001B-LCP-01	UCP	400	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
37	LCP Lamps		24Vdc / **D	Digital	NIS	(CU/XLPE/PVC/SWA/P VC) Gray	12Cx2.5 mm <sup>2</sup>	M32	RU0001B-LCP-01-UCP	RU0001B-LCP-01	UCP	400	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
38	UCP to MCC (UCP Digital Output Command signals for main motor,oil pump, condenser :STT,STP, ETC)		24Vdc / **D	Digital	NIS	(CU/XLPE/PVC/SWA/P VC) Gray	15x2x1 mm <sup>2</sup>	M32	Hold	RU0001B	MCC	400	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
39	MCC to UCP (UCP Digital Input Status signals for main motor,oil pump, condenser : Running,Fault, ETC)		24Vdc / **D	Digital	NIS	(CU/XLPE/PVC/SWA/P VC) Gray	15x2x1 mm <sup>2</sup>	M32	Hold	MCC	RU0001B	400	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
40	UCP to MCC (UCP Digital Output Command signals for VFD condenser :STT,STP, ETC)		24Vdc / **D	Digital	NIS	(CU/XLPE/PVC/SWA/P VC) Gray	10x2x1 mm <sup>2</sup>	M25	Hold	RU0001B	MCC	400	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
41	MCC to UCP (UCP Digital Input Status signals for VFD condenser : Running,Fault, ETC)		24Vdc / **D	Digital	NIS	(CU/XLPE/PVC/SWA/P VC) Gray	10x2x1 mm <sup>2</sup>	M25	Hold	MCC	RU0001B	400	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer
42	UCP to MCC (Analog signals for VFD condenser, Main motor current )		4 to 20mA / 2-wire	Analouge	NIS	(CU/XLPE/PVC/SWA/P VC) Gray	02Px1 mm <sup>2</sup>	M20	Hold	RU0001B	MCC	400	1-Cable and Gland will be supplied By Customer 2-Cable size shall be checked and confirmed by Customer



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1	Item	1
2	DUTY	2 Wire Transmitter,
3	INSTALLATION LOCATION	OUTDOOR
4	INSTALLATION METHOD	-
5	AMBIENT TEMP MIN / MAX	-20 °C / 48 °C
6	CABLE TECHNICAL DATA	
7	MAKE	LATER
8	TYPE	As per EN50288-7
9	CONDUCTORS	Stranded Copper - IEC 60228 class 2
10	INSULATION	XLPE
11	CORE / PAIR / TRIAD	Twisted Pair
12	IDENTIFICATION	Black - white
13	SCREENING	Collective Aluminium/Maylar tape + tinned copper drain wire
14	BEDDING	PVC
15	ARMOUR	Galvanised Steel Wire Armour (SWA)
16	OUTER JACKET	PVC
17	OUTER SHEATH COLOUR	Light Blue
18	CROSS SECTION	1.5 mm <sup>2</sup>
19	NUMBER OF CORES / PARE / TRIADS	1 Pair
20	MAX. OPERATING VOLTAGE	300 / 500 Volt
21	MIN. OPERATING TEMPERATURE	-20 °C
22	MAX. OPERATING TEMPERATURE	+60 °C
23	CONDUCTOR MAXIMUM TEMPERATURE	+90 °C
24		
25	INNER SHEATH DIAMETER	Later
26	OUTER SHEATH DIAMETER	Later
27		
28	FLAME RETARDANT	IEC60332-1-2 / IEC 60332-3-24 (cat.C)
29		
30		
31		
32		
33		
34		
35		



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1	Item	2
2	DUTY	SOLENOID VALVE
3	INSTALLATION LOCATION	OUTDOOR
4	INSTALLATION METHOD	-
5	AMBIENT TEMP MIN / MAX	-20 °C / 48 °C
6	<b>CABLE TECHNICAL DATA</b>	
7	MAKE	LATER
8	TYPE	As per EN50288-7
9	CONDUCTORS	Stranded Copper - IEC 60228 class 2
10	INSULATION	XLPE
11	CORE / PAIR / TRIAD	Pair
12	IDENTIFICATION	Black - white
13	SCREENING	NA
14	BEDDING	PVC
15	ARMOUR	Galvanised Steel Wire Armour (SWA)
16	OUTER JACKET	PVC
17	OUTER SHEATH COLOUR	Gray
18	CROSS SECTION	2.5 mm <sup>2</sup>
19	NUMBER OF CORES / PARE / TRIADS	1 Pair
20	MAX. OPERATING VOLTAGE	300 / 500 Volt
21	MIN. OPERATING TEMPERATURE	-20 °C
22	MAX. OPERATING TEMPERATURE	+60 °C
23	CONDUCTOR MAXIMUM TEMPERATURE	+90 °C
24		
25	INNER SHEATH DIAMETER	Later
26	OUTER SHEATH DIAMETER	Later
27		
28	FLAME RETARDANT	IEC60332-1-2 / IEC 60332-3-24 (cat.C)
29		
30		
31		
32		
33		
34		



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1	Item	3
2	DUTY	Level Switches
3	INSTALLATION LOCATION	OUTDOOR
4	INSTALLATION METHOD	-
5	AMBIENT TEMP MIN / MAX	-20 °C / 48 °C
6	CABLE TECHNICAL DATA	
7	MAKE	LATER
8	TYPE	As per EN50288-7
9	CONDUCTORS	Stranded Copper - IEC 60228 class 2
10	INSULATION	XLPE
11	CORE / PAIR / TRIAD	Twisted Pair
12	IDENTIFICATION	Black - white
13	SCREENING	Collective Aluminium/Maylar tape + tinned copper drain wire
14	BEDDING	PVC
15	ARMOUR	Galvanised Steel Wire Armour (SWA)
16	OUTER JACKET	PVC
17	OUTER SHEATH COLOUR	Gray
18	CROSS SECTION	1.5 mm2
19	NUMBER OF CORES / PARE / TRIADS	2 Pair
20	MAX. OPERATING VOLTAGE	300 / 500 Volt
21	MIN. OPERATING TEMPERATURE	-20 °C
22	MAX. OPERATING TEMPERATURE	+60 °C
23	CONDUCTOR MAXIMUM TEMPERATURE	+90 °C
24		
25	INNER SHEATH DIAMETER	Later
26	OUTER SHEATH DIAMETER	Later
27		
28	FLAME RETARDANT	IEC60332-1-2 / IEC 60332-3-24 (cat.C)
29		
30		
31		
32		
33		
34		
35		