

Sr. No.	Code	Description	Unit	Qty. Required
1	63.108.310	Universal Indicating Controller (Model= SDC36 (C36TCCUA2400), SLP-C35 standard loader for the SDC36 With loader cable, Software (SLP-C35J50) Input = Universal, Output= 4~20mA (Re-transmission) , Size 96*96, Make= Azbil Japan <i>or equivalent.</i>	No	8
2	63.109-New	Level Transmitter with integral display , Type = Guided Wave Radar, Probe type= Solid Rod, Probe Dia. = 16 mm, Measuring length = 500 ~2000 mm (adjustable) , Output =4~20mA HART, Operation= 4-line display, Process connection= 300 lb Flanged, Housing= SS316, Temp.= -196~280 °C, Pressure=150Bar, IP-68, Supply Voltage: 12 ~24VDC, Make= USA /Europe <i>or equivalent.</i>	No	2
3	63.109-New	Level Transmitter (Magnetic Float type), Material: Stainless Steel PFA coated, Process Connection: Flange Type, Guide Tube Dia: 17mm, Measuring length 1300 mm (Zero / Span adjustment) , Float: PFA coated ball type, Float ID:23mm, Float OD:75mm, Specific Gravity: 900Kg/m ³ , Design Pressure: 6 bar, Temperature: 150°C, Protection class: IP68, Mounting Position= vertical, Output: 4~20mA with HART programable, Supply voltage: 12-36 VDC, Make : USA/ Europe <i>or equivalent.</i>	No	4
4	63.013-New	Magnetic Float: PFA coated ball type, Material: SS with PFA coated, Float ID: 23mm, Float OD:80mm, Height: 75mm, Specific Gravity: 900 Kg/m ³ , Design Pressure: (-1 to 25) bar, Temperature: (-100 to 250°C, Protection class: IP68, Impression depth: As per standard with specific gravity i.e. 900Kg/m ³ , Make: USA/Europe <i>or equivalent.</i>	No	4
5	63.108.311	Paperless Recorder (6 channel), No of analog inputs=6, No of Digital inputs=6, No of alarms outputs=6, Input type= universal, output: Relays & Retransmission, data display= Digital/bar graphs/curve, interface= USB for instrument data export, power supply=220 VAC, communication=RS485 with basic software and RS485 connecting cable, Display= TFT. color LCD, Language= English, Make: Honeywell/ Yamatake/ ABB <i>or equivalent.</i>	No	3
6	63.016.005	Ultraviolet Sensing Tube for Photo Sensor C7012A/C, , Part No.= 113228, Make= Honeywell <i>or equivalent.</i>	No	6
7	63.108-New	Flame Detector Relay for use with rectification type flame detectors (C7012 A/C/G), 2-isolated DPDT contacts, Model= R4343D, Supply= 220 VAC, Make: Honeywell <i>or equivalent.</i>	No	4
8	63.108.321	Pt-100 Temperature Sensor (3 wire), Process Connection= 1/2" NPT, Connection head= IP68 (Ex-Proof) Accuracy Class A, Stem length = 12", Sheath dia= 6 mm ,Sheath Material= SS 316, Measuring Range = -20 ~ 200 °C, Make= Germany / Japan / USA <i>or equivalent.</i>	No	10
9	63.108.320	Pt-100 Temperature Sensor (3 wire type) Process Connection= 1/2" NPT, Connection head= IP68 (Ex-Proof) Accuracy Class A, Stem length = 24", Sheath dia= 8 mm, Sheath Material= SS 316, Measuring Range = -20 ~ 200 °C, Make= Germany / Japan / USA <i>or equivalent.</i>	No	6

10	63.109-New	Temperature Gauge (0~100 °C), Capillary Length= 3 meter, Dial Case= DN100, Sensing Bulb dia = 10 mm, Bulb housing tube length (Stem) = 8 inches, Material= SS316, Make= Wise, Fentali etc <i>or equivalent.</i>	No	6
11	63.109.118	Pressure Gauge (Diaphragm Seal Type), Range= 0~6 Bar, Accuracy= 1%, Process Connection= Bottom, wetted Parts= SS 316 , Process Connection= 1/2" NPT, Medium Temp=0~150 °C Dial Size= 4 inch, Make= Europe / USA <i>or equivalent.</i>	No	6
12	63.108.225	Pressure Gauge (Diaphragm Seal Type), Range= 0~ 10 Bar, Wetted parts=SS 316, Process Connection= 1/2" NPT, Dial Size= 4 inch, Make= Europe / USA <i>or equivalent.</i>	No	6
13	63.108.187	Pressure Gauge (Diaphragm Seal Type), Range= 0~ 1000 mmWs, Wetted parts= SS316, Process Connection= 1/2" NPT, Dial Size= 6 inch, Make= Europe / USA <i>or equivalent.</i>	No	6
14	63.028.045	Pressure Gauge (Diaphragm Seal Type), Range= 0~ 2500 mmWs, Wetted parts= SS316, Process Connection= 1/2" NPT, Dial Size= 6 inch, Make= Wise, Wika , Fentali etc, <i>or equivalent.</i>	No	6
15	005.008-New	Pressure Gauge (Diaphragm Type), Range= 0~ 5000 mmWs, Wetted parts= SS316, Process Connection= 1/2" NPT, Dial Size= 6 inch, Make= Wise, Wika , Fentali etc, <i>or equivalent.</i>	No	6
16	63.028.191	Vacuum Gauge (Diaphragm Seal Type), Range= 0~ 760 mmHg, Wetted parts= SS316, Process Connection= 1/2" NPT, Dial Size= 6 inch, Make= Europe / USA <i>or equivalent.</i>	No	6
17	042.098-New	Conductivity Probe, Model= 04905-X01-55-333-20-910-S10-000, Measuring Range: 0-500 uS/cm , Make: Honeywell/Equivalent	No	2
18	63.108-New	pH Electrode, Model= PH435CD for pHTransmitter, Make: FIP Italy <i>or equivalent.</i>	No	2
19	63.1083121	Panel mounted Selector switch (12-Channel) for K-Type thermocouple, internally wired with thermocouple compensating cable, input: 12 (K-type), Output: 1 (k-type), 1 meter K-type fixed lead, input connection= via barrier terminal strip, panel cut out= 45*92mm, body: Robust aluminum construction	No	4
20	63.108-New	Panel mounted Selector switch (6-Channel) for 3-wire Pt-100, input connection: via barrier terminal strip, output: 1 meter PVC insulated four/three wire tail, input selection: Multiple rotary switch, panel cut out: 45*92mm	No	4
21	050.042-New	Solenoid Valve, Size: 2" ,Mag.Nr.35-1, Art Nr.140400, IP54, Volt:230VAC, 90VA, Make: DUNGS <i>or equivalent.</i>	No	1
22	063-001-New	Pressuretrol Controllers, Model= L91B Proportioning, Operating range= 5~150 Psi, Maximum surge pressure= 225 Psi, Potentiometer Resistance= 140 Ohms, Make: Honeywell <i>or equivalent.</i>	No	2

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23	63.109-New	Temperature Transmitter (head mounted), Sensor type: Pt100 3-wire, Range= -10 °C ~ 500 °C, sensor connection= screw type, Measurement Accuracy= 0.1 °C±0.05% of reading, lead wire resistance effect 0.002 °C/Ω, output type= 2-wire 4~20 mA, output connection= screw type, Response time :1sec, Power supply:24VDC, Ambient operating range: 40 °C to 85 °C	No	6
24	63.108-New	Signal Converter (Panel mounted), No of input =1, No of outputs= 2 (4~20 mA), Input= Universal (Pt100, TC, Resistance, 1~5 VDC HART Selectable), output type= 2-wire 4~20 mA (HART), supply: 24VDC, Make= ABB /Siemens/ Rosemount/ Wika or equivalent.	No	20
25	63.108-New	Program Controller for Burner , Model= LFL1333RL Series -2, Make: Siemens or equivalent	No	1
26	63.016-New	Photo cell Tube, Model = QRA 2M, Make = Siemens or equivalent.	No	3
27	63.108-New	Flame Detector Relay , Model: LFE10 Series 02, Volt:220-240VAC, Make: Landis & GYR or equivalent	No	2
28	63.108-New	Cable Ferrule Printing machine Portable, Printing Method= Thermal Transfer, Input Modes= Alphanumeric ,Symbol input , PC interfac= complete PC connection kit with printing machine, Print Media options= PVC tube with tube attachment Dia: 2mm -5mm, Heat Shrink tube with tube attachment size : 2:1 shrinkage dia 3.2 mm - 6.4 mm, Label Tape cassette white width 6mm, Storage: built in memory for saving files, Make= Cannon / Brady/ Equivalent.	No	1
29	21.045-New	Label Tape width: 6mm* length:50ft, color= white, Material= Vinyl, Printing Technique= Thermal Transfer, Label Properties= Adhasive ,Make= Cannon/Brady/ Equivalent	Roll @50 ft	3

Detailed Specifications of the Items as Per Purchase Indent

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1. Universal Indicating Controller

Qty:08

Make	= Azbil Japan
Model	=SDC36 (C36TCCUA2400) <i>or equivalent</i>
Input	=Universal
Output	= 4~20 mA & Retransmission Current
Size	=96x96mm
No of Digital Inputs / outputs	= 2 each.
Power Supply	=165~285 Vac , 50 Hz

2. Guided Wave Radar Type Level Transmitter

Qty:02

Active Probe Measuring length	= 500 ~2000 mm (Adjustable)
Output	=4~20 mA, HART + 4- Line Display
Supply Voltage	=12~36 VDC
Probe Type	=Solid Rod
Probe Dia	= 16 mm
Pressure	=150 Bar
Temp.	= -196~280 °C
Display & Parameter settings	= Digital & Key pad
Process Connection	=Flanged
Degree of Protection	=IP68
Make	= USA /Europe <i>or Equivalent.</i>

3. Magnetic Float Type Stainless Steel PFA coated Level Transmitter

Qty:04

Active Probe Measuring length	= 1300 mm (Zero / Span Adjustment)
Output	=4~20 mA, HART
Supply Voltage	=12~36 VDC
Probe Type /Make	=Stainless Steel PFA coated
Guide Tube Dia	= 17 mm
Mounting Position:	= Vertical
Float Type:	= PFA coated ball type
Float ID/OD:	=23/75mm

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Specific Gravity:	=900Kg/m ³
Pressure	=6 Bar
Temp.	=150°C
Parameter settings	= Key pad
Process Connection	=Flanged
Degree of Protection	=IP68
Make	= USA /Europe <i>or equivalent</i>

4. Magnetic Float Ball Type PFA coated

Qty:04

Material	= PFA coated with ball type
Float ID/OD	= 23/80 mm
Float Height:	= 75mm
Specific Gravity:	=900 Kg/m ³
Pressure	= -1 to 25 Bar
Temp.	= -100 to 150°C
Degree of Protection	=IP68
Impression Depth:	= As per standard with specific gravity i.e 900 Kg/m ³
Make	= USA /Europe <i>or equivalent</i>

5. Paperless Recorder (6-channel)

Qty:03

Number of Analog Input	=06
Number of Digital inputs:	=06
Number of Alarms:	=06
Input type:	= universal
Output:	=Relays and Retransmission
Display:	= Digital/bar, graphs/curve (TFT color LCD)
Interface:	=USB for instrument data export
Communication:	= RS485 with basic software and connecting cable
Language:	=English
Power Supply	=220 VAC
Make	= Honeywell/ Yamatake/ ABB <i>or equivalent.</i>

6. Ultraviolet Sensing Tube for Photo Sensor C7012A/C

P: 7/14
Qty: 06

Part No.

= 113228

Make

= Honeywell or equivalent.

7. Flame Detector Relay with rectification type flame detectors (C7012 A/C/G)

Qty: 04

Contacts Type: = 2-isolated DPDT

Model = R4343D

Supply = 220 VAC

Make: = Honeywell or equivalent

8. Pt-100 Temperature Sensor (3 wire)

Qty: 10

Process Connection = 1/2" NPT

Connection head = IP68 (Ex-Proof)

Accuracy Class = A

Stem length = 12"

Sheath dia = 6 mm

Sheath Material = SS 316

Measuring Range = -20 ~ 200 °C

Make = Germany / Japan / USA or equivalent.

9. Pt-100 Temperature Sensor (3 wire)

Qty: 06

Process Connection = 1/2" NPT

Connection head = IP68 (Ex-Proof)

Accuracy Class = A

Stem length = 24"

Sheath dia = 8 mm

Sheath Material = SS 316

Measuring Range = -20 ~ 200 °C

Make = Germany / Japan / USA or equivalent.

10. Temperature Gauge (0~100 °C)

Qty: 06

Capillary Length = 3 meter

Dial Case = DN100

Sensing Bulb dia = 10 mm

Bulb housing tube length (Stem) = 8 inches

Material = SS316

Make = Wise, Fentali etc or equivalent.

[Type text]

11. Pressure Gauge (Diaphragm Seal Type)

Range	= 0~6 Bar
Accuracy	= 1%
Process Connection	= Bottom
Wetted Parts	= SS 316
Process Connection	= 1/2" NPT
Medium Temp	= 0~150 °C
Dial Size	= 4 inch
Make	= Europe / USA or equivalent.

12. Pressure Gauge (Diaphragm Seal Type)

Qty:06

Range	= 0~10 Bar
Accuracy	= 1%
Process Connection	= Bottom
Wetted Parts	= SS 316
Process Connection	= 1/2" NPT
Medium Temp	= 0~150 °C
Dial Size	= 4 inch
Make	= Europe / USA or equivalent.

13. Pressure Gauge (Diaphragm Seal Type)

Qty:06

Range	= 0~1000mmWs
Accuracy	= 1%
Process Connection	= Bottom
Wetted Parts	= SS 316
Process Connection	= 1/2" NPT
Medium Temp	= 0~150 °C
Dial Size	= 6 inch
Make	= Europe / USA or equivalent.

14. Pressure Gauge (Diaphragm Seal Type)

Qty:06

Range	= 0~2500mmWs
Accuracy	= 1%
Process Connection	= Bottom
Wetted Parts	= SS 316
Process Connection	= 1/2" NPT

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Medium Temp = 0~150 °C
Dial Size = 6 inch
Make = Europe / USA or equivalent.

15. Pressure Gauge (Diaphragm Seal Type)

Qty:06

Range = 0~5000mmWs
Accuracy = 1%
Process Connection = Bottom
Wetted Parts = SS 316
Process Connection = 1/2" NPT
Medium Temp = 0~150 °C
Dial Size = 6 inch
Make = Europe / USA or equivalent.

16. Vacuum Gauge (Diaphragm Seal Type)

Qty:06

Range = 0~760mmHg
Accuracy = 1%
Process Connection = Bottom
Wetted Parts = SS 316
Process Connection = 1/2" NPT
Medium Temp = 0~150 °C
Dial Size = 6 inch
Make = Europe / USA or equivalent.

17. Conductivity Probe

Qty:02

Model = 04905-X01-55-333-20-910-S10-000
Measuring Range: = 0-500 uS/cm
Make: = Honeywell (Equivalent not acceptable)

18. pH Electrode

Qty:02

Model = PH435CD for pH Transmitter
Make: = FIP Italy or equivalent.

19. Panel mounted Selector switch (12-Channel) for K-Type thermocouple

Qty:04

Type: = internally wired with thermocouple compensating cable
Input: = 12 (K-type)
Output: = 1 (k-type) with 1 meter K-type fixed lead

Input connection = via barrier terminal strip
 Panel cut out = 45*92mm,
 Body: = Robust aluminum construction

20. Panel mounted Selector switch (06-Channel) for 3-wire Pt-100

Qty:04

Type: = internally wired with thermocouple compensating cable
 Input selection: = Multiple rotary switch
 Output: = 1 meter PVC insulated four/three wire tail
 Input connection = via barrier terminal strip
 Panel cut out = 45*92mm

21. Solenoid Valve, Mag.Nr.35-1 (SIZE: 2")

Qty:01

Art Nr. = 140400, IP54
 Volt: = 230VAC, 90VA
 Make: = DUNGS or equivalent.

22. Pressuretrol Controllers

Qty:02

Model = L91B Proportioning
 Operating range = 5~150 Psi
 Maximum surge pressure = 225 Psi
 Potentiometer Resistance = 140 Ohms
 Make: = Honeywell or equivalent.

23. Temperature Transmitter (head mounted), Sensor type: Pt100 3-wire

Qty:06

Range = -10 °C ~ 500 °C,
 sensor connection = screw type,
 Measurement Accuracy = 0.1 °C ± 0.05% of reading, lead wire resistance effect 0.002 °C/Ω,
 output type = 2-wire 4~20 mA
 output connection = screw type
 Response time: = 1sec
 Power supply: = 24VDC
 Ambient operating range: = -40 °C to 85 °C

24. Signal Converter (Panel mounted)

Qty:20

No of input = 1
 No of outputs = 2 (4~20 mA)
 Input = Universal (Pt100, TC, Resistance, 1~5 VDC HART Selectable)
 Output type = 2-wire 4~20 mA (HART)

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Supply:

=24VDC

Make:

= ABB /Siemens/ Rosemount/ Wika *or equivalent.*

25. Program Controller for Burner

Qty:01

Model

= LFL1333RL Series -2

Make:

=Siemens

26. Photo cell Tube

Qty:03

Model

= QRA 2M

Make

= Siemens *or equivalent.*

27. Flame Detector Relay

Qty:02

Model:

=LFE10 Series 02,

Volt:

=220-240VAC

Make:

=Landis & GYR *or equivalent.*

28. Cable Ferrule Printing machine Portable

Qty:01

Printing Method

= Thermal Transfer

Input Modes

= Alphanumeric ,Symbol input

PC Interface

= complete PC connection kit with printing machine

Print Media options

-PVC tube with tube attachment Dia: 2mm -5mm

-Heat Shrink tube with tube attachment: size : 2:1 shrinkage dia 3.2 mm - 6.4 mm

- Label Tape cassette, color: white, width: 6mm

Storage:

=built in memory for saving files

Make

= Cannon / Brady/ Equivalent. *or equivalent.*

29. Roll of Label Tape

Qty: 03

Roll Size

= width: 6mm* length 50ft

Color

= white

Material

= Vinyl

Printing Technique

= Thermal Transfer

Label Properties

= Adhesive

Make

= Cannon/Brady/ Equivalent *or equivalent.*