This questionnaire is intended as a guide to help define the requirements for the control panel design. It will be used as a means to provide a complete and accurate quotation.

This questionnaire should be filled out in the presence of a sales representative for The Industrial Controls Company. If a completed questionnaire containing all required information is not submitted with the RFQ, one will be filled out by a representative of The Industrial Controls Company and included with the quotation. In the case of an incomplete questionnaire, one where information is missing, the missing information will be added using the most logical choice. In all cases, the completed questionnaire will provide a summary of what is being quoted.

If the RFQ includes more than one enclosure type, a questionnaire must be filled out for each enclosure.

DATE: ________________________________

CONTACT INFORMATION

COMPANY: ______________________________________________________________

NAME: _________________________________________________________________

TITLE: _________________________________________________________________

ADDRESS: _____________________________________________________________

CITY: __________________________ STATE: __________ ZIP: ______________

PHONE: __________________________ EXT: ______________

DIRECT LINE: ______________________ CELL: _______________________

EMAIL ADDRESS: ____________________________________________________

Page 1 of 12
A UNIQUE NAME OR DESCRIPTION FOR THE PROJECT. FOR EXAMPLE: FIREHOUSE NO.36 - HVAC UPGRADE, TEMPERING PLANT - HEAT RECOVERY UPGRADE.

A UNIQUE NAME OR DESCRIPTION FOR CONTROL PANEL THAT WILL BE USED AS A REFERENCE FOR THIS QUESTIONNAIRE. FOR EXAMPLE: MIXING ROOM EXHAUST CONTROL PANEL, OXIDIZER OPERATOR CONTROL PANEL, LIFT STATION TERMINAL JUNCTION BOX.

1.00 NUMBER OF QUESTIONNAIRES (PANELS) IN THIS PROJECT

This is questionnaire is number ________ of __________

2.00 ENCLOSURE TYPE (CHECK ONLY ONE)

☐ NONE REQUIRED
☐ WALL-MOUNTED CONTROL PANEL
☐ FLOOR-MOUNTED CONTROL PANEL
☐ FREE-STANDING CONTROL PANEL
☐ WAL-MOUNTED OPERATOR INTERFACE CONTROL PANEL
☐ CONSOLE TYPE OPERATOR INTERFACE CONTROL PANEL
☐ PUSHBUTTON STATION
☐ TERMINAL JUNCTION BOX
☐ OTHER ___________________________
3.00 CERTIFICATIONS REQUIRED (CHECK ALL THAT APPLY)

[ ] NONE REQUIRED

[ ] UL/cUL LABEL FOR INDUSTRIAL CONTROL PANELS

[ ] UL LABEL FOR EXPLOSION CONTROL PANELS

[ ] UL LABEL FOR INTRINSICALLY SAFE CONTROL PANELS

[ ] CSA

[ ] CE

[ ] OTHER ________________________________

4.00 ENCLOSURE LOCATION (CHECK ALL THAT APPLY)

[ ] NOT APPLICABLE

[ ] INSIDE

[ ] OUTSIDE [ ] DIRECT SUNLIGHT

OUTSIDE AIR FLOW CONDITIONS

[ ] CALM [ ] BREEZY [ ] WINDY

DISTANCE FROM OCEAN (SALT WATER) ___________________________ MILES

5.00 ENVIRONMENTAL (COMPLETE ALL CHOICES)

[ ] NOT APPLICABLE

MAXIMUM AMBIENT TEMPERATURE ________________________ °F

MINIMUM AMBIENT TEMPERATURE ________________________ °F

MAXIMUM RELATIVE HUMIDITY ____________________ % (NON-CONDENSING)

ZIP CODE OF FINAL INSTALLATION ________________________

ALTITUDE OF FINAL INSTALLATION _________________________ FEET ABOVE SEA LEVEL
6.00 ENCLOSURE RATING (CHECK ONLY ONE)

☐ NOT APPLICABLE

☐ TYPE 1    ☐ TYPE 3R    ☐ TYPE 12

☐ TYPE 4    ☐ TYPE 4X

☐ TYPE 13

☐ IP20    ☐ IP50    ☐ IP65    ☐ IP68

☐ OTHER ________________________________

7.00 ENCLOSURE CONSTRUCTION (CHECK ONLY ONE)

☐ NOT APPLICABLE

☐ PAINTED STEEL    ☐ ANSI 61 GRAY    ☐ RAL 7035 LT. GRAY

☐ SPECIAL COLOR ________________________________

☐ ALUMINUM

☐ 304 SS

☐ 316 SS

☐ FIBERGLASS

☐ POLYCARBONATE

☐ ABS

☐ OTHER ________________________________
8.00  CUSTOMER SUPPLIED ELECTRICAL SERVICES (CHECK ALL THAT APPLY)

3 PHASE  (CHECK ONLY ONE)

☐ NOT APPLICABLE
☐ 575 VOLTS  ☐ 460 VOLTS  ☐ 230 VOLTS  ☐ 208 VOLTS
☐ 400 VOLTS  ☐ 220 VOLTS  ☐ 200 VOLTS
☐ OTHER

3 PHASE SERVICE, ENCLOSURE ENTRY POINT (CHECK ONLY ONE)

☐ NO PREFERENCE
☐ TOP OF ENCLOSURE
☐ BOTTOM OF ENCLOSURE
☐ RIGHT SIDE OF ENCLOSURE
☐ LEFT SIDE OF ENCLOSURE

1 PHASE (CHECK ONLY ONE)

☐ NOT APPLICABLE
☐ 220 VOLTS  ☐ 115 VOLTS
☐ OTHER

SINGLE PHASE SERVICE, ENCLOSURE ENTRY POINT (CHECK ONLY ONE)

☐ NO PREFERENCE
☐ TOP OF ENCLOSURE
☐ BOTTOM OF ENCLOSURE
☐ RIGHT SIDE OF ENCLOSURE
☐ LEFT SIDE OF ENCLOSURE
3 PHASE / 1PHASE (CHECK ONLY ONE)

☐ NOT APPLICABLE

☐ 60 HZ  ☐ 50 HZ  ☐ 50/60 HZ

MINIMUM SHORT CIRCUIT CURRENT TO DESIGN FOR? (CHECK ONLY ONE)

☐ NOT APPLICABLE

☐ 5 KA  ☐ 10 KA  ☐ 25 KA  ☐ 50 KA  ☐ 75 KA  ☐ 100 KA

☐ OTHER

9.00 DESIRED CONTROL VOLTAGE (CHECK ONLY ONE)

☐ NOT APPLICABLE

☐ 120V AC  ☐ 24V AC  ☐ 24V DC  ☐ 220V AC

☐ OTHER

CONTROL WIRING, ENCLOSURE ENTRY POINT (CHECK ALL THAT APPLY)

☐ NO PREFERENCE

☐ TOP OF ENCLOSURE

☐ BOTTOM OF ENCLOSURE

☐ RIGHT SIDE OF ENCLOSURE

☐ LEFT SIDE OF ENCLOSURE
10.00 CUSTOMER SUPPLIED PARTS (CHECK ONLY ONE)

☐ NOT APPLICABLE

☐ ALL PARTS WILL BE SUPPLIED BY THE INDUSTRIAL CONTROLS COMPANY

☐ CUSTOMER WILL SUPPLY THE FOLLOWING PARTS

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
11.00 AVAILABLE DESIGN DOCUMENTS/SPECIFICATIONS (CHECK ALL THAT APPLY)

☐ NO SPECIFICATIONS AVAILABLE

☐ FUNCTIONAL SPECIFICATION

☐ SEQUENCE OF OPERATION

☐ GENERAL ELECTRICAL SPECIFICATIONS. IF THERE IS NO CUSTOMER ELECTRICAL SPECIFICATION AVAILABLE, THE INDUSTRIAL CONTROLS COMPANY WILL USE THEIR STANDARD MANUFACTURING AND WIRING METHODS.

☐ APPROVED MANUFACTURERS. IF THERE IS NO CUSTOMER APPROVED LIST OF MANUFACTURERS AVAILABLE, THE INDUSTRIAL CONTROLS COMPANY WILL PICK THE MOST COST EFFECTIVE COMPONENTS FOR THE APPLICATION.

☐ CAD/DRAFTING SPECIFICATIONS. IF THERE IS NO CUSTOMER SPECIFICATIONS FOR CAD/DRAFTING, THE INDUSTRIAL CONTROLS COMPANY WILL USE ITS STANDARD FORMAT ON THE INDUSTRIAL CONTROLS COMPANY TITLE BLOCK. ALL DRAWINGS WILL BE DONE USING THE 2D VERSION OF AUTOCAD ELECTRICAL, VERSION: ____________________

☐ PLC PROGRAMMING SPECIFICATIONS. IF THERE IS NO CUSTOMER SPECIFICATIONS FOR PLC PROGRAMMING, THE INDUSTRIAL CONTROLS COMPANY STANDARD PLC PROGRAMMING METHODS WILL BE USED.

☐ HMI PROGRAMMING SPECIFICATIONS. IF THERE IS NO CUSTOMER SPECIFICATIONS FOR HMI PROGRAMMING, THE INDUSTRIAL CONTROLS COMPANY STANDARD HMI PROGRAMMING METHODS WILL BE USED.

☐ ELECTRICAL SCHEMATICS ☐ ELECTRONIC ☐ HARD COPY

☐ ELECTRICAL BOM ☐ ELECTRONIC ☐ HARD COPY

☐ ENCLOSURE & SUB PANEL L/O ☐ ELECTRONIC ☐ HARD COPY

☐ OTHER AVAILABLE DESIGN DOCUMENTS/SPECIFICATIONS NOT LISTED ABOVE.
CONTROL PANEL DESIGN QUESTIONNAIRE
PROPERTY OF THE INDUSTRIAL CONTROLS CO
DO NOT DISTRIBUTE OR COPY WITHOUT DIRECT CONSENT

12.00 SERVICES TO BE PROVIDED (CHECK ALL THAT APPLY)

☐ NEW PRODUCT DESIGN (REQUIRES A CUSTOMER SUPPLIED FUNCTIONAL DESCRIPTION OF THE PRODUCT, HOW IT WILL OPERATE, AND ESTIMATES OF YEARLY QUANTITIES). PRICING WILL ONLY BE CONSIDERED BUDGETARY UNTIL A DETAILED FUNCTIONAL DESCRIPTION IS PROVIDED.


1.0 ELECTRICAL BOM SHOWING, COMPONENT QUANTITIES, COMPONENT MANUFACTURER, COMPONENT MANUFACTURER’S PART NUMBERS, A BRIEF DESCRIPTION OF THE PART, AND WHETHER SUBSTITUTIONS WOULD BE CONSIDERED.

2.0 ELECTRICAL WIRING DIAGRAMS, INCLUDING SCHEMATICS, ONE-LINE OR THREE-LINE POWER WIRING.

3.0 A SUB PANEL LAYOUT SHOWING ALL COMPONENTS TO BE MOUNTED ON THE SUB PANEL. THIS DRAWING MUST BE DRAWN TO SCALE AND AVAILABLE AT A MINIMUM IN DWG OR DXF FORMAT.

4.0 AN ENCLOSURE LAYOUT SHOWING ALL COMPONENTS TO BE MOUNTED ON THE SURFACE OR THROUGH THE SKIN OF THE ENCLOSURE. ALL NECESSARY VIEWS (TOP, BOTTOM, SIDE, ETC.) REQUIRED TO DESCRIBE LOCATION OF THESE COMPONENTS SHALL BE INCLUDED. THIS DRAWING MUST BE DRAWN TO SCALE AND BE AVAILABLE ELECTRONICALLY EITHER IN DWG OR DXF FORMAT.

5.0 A MODIFIED ENCLOSURE DRAWING SHOWING CUTOUT DETAILS FOR ALL COMPONENTS TO BE MOUNTED ON THE SURFACE OR THROUGH THE SKIN OF THE ENCLOSURE. ALL NECESSARY VIEWS (TOP, BOTTOM, SIDE, ETC.) REQUIRED TO DESCRIBE THE LOCATION OF ALL CUTOUTS SHALL BE INCLUDED. THIS DRAWING MUST BE DRAWN TO SCALE AND BE AVAILABLE ELECTRONICALLY EITHER IN DWG OR DXF FORMAT.

☐ ASSEMBLE & WIRE A CONTROL PANEL USING DRAWINGS AND OTHER ENGINEERING INFORMATION PROVIDED BY THE INDUSTRIAL CONTROLS COMPANY.

☐ ELECTRICAL SCHEMATICS

☐ CONTROL PANEL DESIGN - SUB PANEL LAYOUT & TERMINAL BLOCK LISTING
CONTROL PANEL DESIGN QUESTIONNAIRE
PROPERTY OF THE INDUSTRIAL CONTROLS CO
DO NOT DISTRIBUTE OR COPY WITHOUT DIRECT CONSENT

☐ CONTROL PANEL DESIGN - MODIFICATION (CUT-OUT) DETAILS

☐ PLC PROGRAMMING PER APPROVED CUSTOMER SUPPLIED SEQUENCE OF OPERATION. PLC PROGRAMMING CAN NOT BE QUOTED WITHOUT A SEQUENCE OF OPERATION.

☐ OPERATOR (HMI) INTERFACE PROGRAMMING MATCHING THE ABOVE PLC PROGRAM. THE FOLLOWING FUNCTIONS SHALL BE PROVIDED (CHECK ALL THAT APPLY).

☐ ALARMS (REQUIRES A CUSTOMER FUNCTIONAL DESCRIPTION OF HOW THE ALARMS WILL BE HANDLED AT THE TIME THAT THE PROGRAMMING IS DONE).

☐ ANNOTATED EQUIPMENT LAYOUT

☐ OPERATORS (PUSHBUTTONS, SELECTOR SWITCHES, PILOT LIGHTS, ETC.)

☐ NUMERIC INDICATORS _____________ TO BE INCLUDED

☐ NUMERIC SETPOINTS _____________ TO BE INCLUDED

☐ PRODUCT RECIPES (REQUIRES A CUSTOMER FUNCTIONAL DESCRIPTION OF THE RECIPE FORMAT AND RECIPE HANDLING AT THE TIME THAT THE PROGRAMMING IS DONE). PLEASE LIST THE NUMBER OF RECIPES TO BE INCLUDED AND THE NUMBER OF VARIABLE IN EACH RECIPE BELOW?

__________ RECIPES AT __________ VARIABLES EACH TO BE INCLUDED

☐ OTHER

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

☐ OPERATING MANUAL

☐ POWER THREE-LINE DIAGRAMS

☐ POWER ONE-LINE DIAGRAMS

☐ INSTALLATION - PROJECT MANAGEMENT
INSTALLATION - WIRE AND/OR CABLE SCHEDULES

INSTALLATION - STARTUP ASSISTANCE

The length of startup assistance shown below is only an estimate based on the scope of the project as it stands now and under perfect conditions. Many variables will directly affect the actual number of days; for example, project scope changes, equipment readiness, and equipment mechanically functioning as designed, just to name a few. Extra days of startup assistance will be billed at the rates in effect at the time the startup assistance takes place. Living and traveling expenses will be billed at cost plus 15%.

Startup assistance estimated at ____________ days (portal-to-portal)
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