FlexConnect[™] Solutions for Honeywell[®] TDC 2000[™] Systems



FlexConnect[®] Solutions protect your wiring investment as you convert from Honeywell[®] TDC 2000[®] to the DeltaV[®] system

- Reduce business risks by minimizing process downtime
- Save 75% of installation costs
- Preserve HART[®] signals

Introduction

If concerns about downtime and wiring costs are preventing you from migrating your Honeywell[®] TDC 2000[™] system to a new DeltaV[™] system, consider FlexConnect[™] Solutions for Honeywell TDC 2000 Systems.

Benefits

Reduce business risks by minimizing process downtime. This solution brings device signals to DeltaV I/O from existing TDC 2000 I/O termination panels. Keeping device wires intact accelerates the new system startup, enabling you to rapidly resume production.

Save 75% of installation costs. Eliminating new device wiring saves money and reduces risk of errors. Time and materials savings are significant.

Preserve HART signals. Use HART^{*} Pass-through for complete diagnostics at the DeltaV Operator Station.





Product Description and Specification

FlexConnect Solutions provide direct connection from Honeywell TDC 2000 termination panels (aka Field Termination Assemblies – FTA's) to M and S-series DeltaV I/O card terminal blocks and/or Electronic Marshalling CHARMs. To simplify the installation, as an option Emerson can pre-wire the FlexConnect Solutions to DeltaV terminal blocks and/or CHARMs.

The following Honeywell TDC 2000 termination panel point types have FlexConnect Solutions as described here:

TDC 2000 Basic, Multi-Function and Extended Controller Terminal Panel I/O

Honeywell TDC 2000 TCB00, TCB20, TCB21 and TCB30 termination panels have eight screw terminal strips. FlexConnect Solutions cables connect J2, J3 and J4 to standard DeltaV AI and AO cards, and/or CHARMs.

Analog Remote / Process Variable (RV / PV) Input

J2 and J3 terminations connect RV / PV 1-4 and RV / PV 5-8, respectively to two 8 channel DeltaV 4-20mA AI cards and/or AI CHARMs.

Analog Process Variable (PV) Output

J4 terminations connect up to 8 Analog Outputs to an 8 channel DeltaV 4-20mA AO card and/or AO CHARMs.

TDC 2000 Multi-Function Point Card Terminal Panel I/O

The Honeywell TDC 2000 TCB50 / 60 termination panel contains eight screw-terminal strips configurable as analog or digital inputs or outputs. FlexConnect Solutions cables connect J1- J4 to standard DeltaV analog and digital I/O cards, and/or CHARMs.

Analog Inputs

Sixteen Analog Inputs connect two 8 channel DeltaV 4- 20mA AI cards, or to AI CHARMs.

Analog Outputs

Eight Analog Inputs connect to an 8 channel DeltaV 4-20mA AO cards, or to AO CHARMs.

Discrete Inputs

Thirty-two Discrete Inputs connect a 32 channel DeltaV DI dry contact card, or to DI CHARMs.

Discrete Outputs

Sixteen Relay Outputs connect to a 32 channel DeltaV DO high-side card, or to DO CHARMs.

Ordering Information

For inquiries and ordering information, please contact your local Emerson sales office. Please specify required cable lengths on your request. FlexConnect Solutions for specific Honeywell termination panel models are indicated in the following table:

FlexConnect Solutions #	Termination Panels TCB00, 20, 21, 30	TDC 2000 Signal Types	DeltaV I/O Card Types	FlexConnect Solutions Drawing Numbers
FC-H2-CBL-2-11	AI, RV (J2, J3)	8 AI each on J2 & J3 16 AI total	8 Al (two)	FC-H2-J23AI, FC-H2-CAB-J23AI
FC-H2-CBL-1-21	AIO, PV (J4)	8 AO	8 AO	FC-H2-J4AO, FC-H2-CAB-J4AO
FlexConnect Solutions #	Termination Panels TCB50, 60	TDC 2000 Signal Types	DeltaV I/O Card Types	FlexConnect Solutions Drawing Numbers
FC-H2-CBL-2-10	AI: 4-20mA	16 AI	8 AI (two)	FC-H2-AI16, FC-H2-CAB-AI16
FC-H2-CBL-1-20	AO: 4-20mA	8 AO	8 AO	FC-H2-AO8, FC-H2-CAB-AO8
FC-H2-CBL-3-50	DI: Dry Contact	32 DI	32 DI	FC-H2-DI32, FC-H2-CAB-DI32
FC-H2-SOL-2-60	DO: Relay Output	16 DO	32 DO	FC-H2-D016, FC-H2-CAB-D016

(Note: FlexConnect Solutions drawings are available upon request.)

For these TDC 2000 I/O types, contact your local Emerson sales office to discuss solution options;

- HLPIU or LLPIU TDC 2000 Point Card File Assembly
- LEPIU & MUX Box Solutions
- Advanced Multifunction Controller (AMC) J-RTP terminations

Prerequisites

A preliminary site visit is required to survey installed control system architecture and electrical grounding practices, to document I/O models and numbers of each, and to review schedule constraints and turnaround objectives. Qualified Emerson engineers or technicians perform site reviews.

Services

For help in planning, justifying or implementing your system migration, contact your local Emerson representative. Expert consultants are available to advise you on a variety of concerns, including safety system design, implementation and standards compliance; digital buses, wireless applications, control performance, and process optimization.

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