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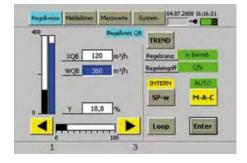
Казахстан +7(7172)727-132

Киргизия +996(312)96-26-47

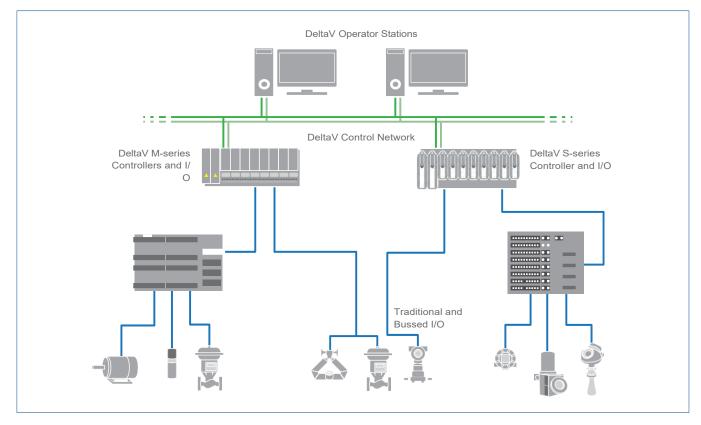
### сайт: www.honeywell.nt-rt.ru || эл. почта: hwn@nt-rt.ru

## КОНТРОЛЛЕРЫ

## Технические характеристики на TDC 2000, TDC 3000



# DeltaV<sup>™</sup> Flex.CONNECT Solutions for Honeywell<sup>®</sup> TDC 2000<sup>™</sup> I/O



DeltaV<sup>™</sup> Flex.CONNECT Solutions protect your wiring investment as you convert from Honeywell® TDC 2000<sup>™</sup> to the DeltaV<sup>™</sup> 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 DeltaV Flex.CONNECT 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**

DeltaV Flex.CONNECT 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 DeltaV Flex.CONNECT solutions to DeltaV terminal blocks and/or CHARMs.

The following Honeywell TDC 2000 termination panel point types have DeltaV Flex.CONNECT 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. DeltaV Flex.CONNECT 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. DeltaV Flex.CONNECT 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 Al cards, or to Al 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. DeltaV Flex.CONNECT solutions for specific Honeywell termination panel models are indicated in the following table:

(Note: DeltaV Flex.CONNECT solutions drawings are available upon request.)

Flex.CONNECT Solutions #	Termination Panels TCB00, 20, 21, 30	TDC 2000 Signal Types	DeltaV I/O Card Types	Flex.CONNECT Solutions Drawing Numbers
FC-H2-CBL-2-11	AI, RV (J2, J3)	8 AI each on J2 & J3 16 AI total	8 AI (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
Flex.CONNECT Solutions #	Termination Panels TCB50, 60	TDC 2000 Signal Types	DeltaV I/O Card Types	Flex.CONNECT Solutions Drawing Numbers
FC-H2-CBL-2-10	AI: 4-20mA	16 AI	8 AI (two)	FC-H2-Al16, FC-H2-CAB-Al16
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

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

## Enhance the Value of Your Installed Automation Systems

Powerful Solution for Honeywell TDC 3000® Migration

**Automation systems that** leverage state-of-the-art technology and practices can improve the overall financial performance of a manufac-turing facility. However, replacing any older process control system with a newer generation system can be capital intensive. Siemens can help migrate your current TDC 3000 DCS and have your plant back in operation, usually in less than a day, without any modification or rework to the field instrumentation wiring.

Often, effective vendorsupplied training and technical support resources diminish quickly. Siemens helps manufacturers manage their migration to current automation products and systems. As a result of such system migration, Siemens customers realize:

- Improved production throughput
- Reduced training requirements
- Improved time to market
- Improved operator efficiency
- Reduced maintenance risk
- Decreased cost on replacement parts
- Reduced cycle time
- Minimized IT support costs

implementa-tion to your automation systems. Above all, we want to improve the productivity and profitability of your company. The end result of our migration strategy for process automation is a field-proven and globally accepted process control system that leverages the latest in innovative technology. Siemens works closely with you to devise a migration plan tailored to your needs that best meets your plans, schedule, and budget. This allows you to replace your existing system in a stepwise approach with minimal impact to your operations.

migration strategies and

Reduce Total Cost of Ownership

One common problem facing manufac-turers is reliance on older systems with diminishing installed base and inadequate technical support from the supplier. Such legacy automation systems rely on dated technology, and replacement parts and components can be difficult, if not impossible, to obtain.

Improve Return on Investment

We help reduce the risk to manufacturing operations while improving your bottom line. Siemens applies unmatched expertise in Honeywell

We offers migration strategies from the Honeywell TDC 3000 to the SIMATIC® PCS 7 process control system to bring the latest control technology to your plant while minimizing the down time required to change systems.

To avoid lost production, the cutover or migration from an existing control system to a new system has to be accomplished in the shortest time possible with minimal impact to manufacturing operations. One of the most time-consuming tasks in a typical migration project is reworking the field instrumentation wiring over to the new system. Siemens offers several solutions to help you manage this challenge.

Avoid Field Rewiring

Leaves your field wiring and original Honeywell field termination assembly (FTA) cabinets in place and simply replaces the old FTA boards with new Siemens FTA boards. The Siemens FTA boards are the same size and have the same

terminal blocks and mounting hole dimensions as the old Honeywell FTA boards. The original, wired terminal blocks are plugged into the new FTA boards which are in turn connected to PCS 7 I/O modules in a new cabinet. This strategy eliminates the time and high cost of rewiring the field devices.

Reduce Production Downtime

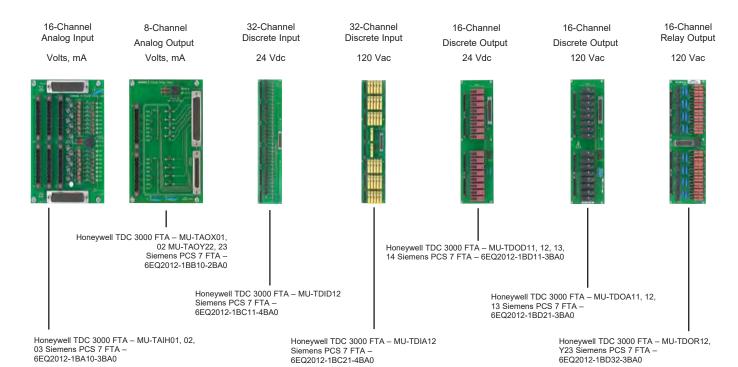
Replacement Field Termination sembly (FTA) boards and erconnect cables are available to support this migration solution. The new cables plug into matching PCS 7 I/O modules, duplicating the original control system hardware. From this point, the system can now utilize all the latest process control technology from Siemens. Technology such as the Siemens PCS 7 process control system hardware, using

the powerful S7-400 controller and the the PCS 7 Windows®-based operator station. The PCS 7 system can be quickly brought online and production resumed in usually one day.

Speed Checkout and Startup

nce the I/O is unchanged, the ginal control program and screen displays can be manually duplicated in the new system, updated, and tested prior to the changeover. To complete the migration, the original Honeywell control cabinet is replaced with the PCS 7 controller and I/O cabinet. Using your proven control strategy and undisturbed field devices, system checkout and startup is efficient and goes quickly.

### Module Description



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Сыктывкар (8212)25-95-17

Россия +7(495)268-04-70

Казахстан +7(7172)727-132

Киргизия +996(312)96-26-47

## сайт: www.honeywell.nt-rt.ru || эл. почта: hwn@nt-rt.ru