

# drive.web **smarty-XD**®

Universal Automation Controller  
with XD Option

model



**dw25x-xx-XDxx**

## Installation & Operation Manual

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### Design Statements

EMC Standard, EN 61326-1: 2006, Electrical Equipment for Measurement, Control and Laboratory Use.

Emissions Class A, Commercial Equipment.

Immunity Table 2, Industrial Equipment.

LVD Standards, EN 61010-1: 2010, Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use.

**smarty** is an industrial controller designed for permanent installation by qualified professionals. If it is used in a manner not specified herein the protection provided may be impaired.

**smarty** and its packaging contain recyclable materials

This device is designed to comply with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This Class [A] digital apparatus is designed to comply with Canadian ICES-003. Cet appareil numérique de la classe [A] est conforme à la norme NMB-003 du Canada.

**Warning!** It is essential that you read and understand this entire manual and the entire contents of the **savvy** software **Help** menu before proceeding with your installation and configuration. See page 6 for **savvy** installation instructions. For more information and to download manuals and software, go to [www.driveweb.com](http://www.driveweb.com) or contact us. See page 12.

**Warning!** Your use of **savvy** software and **drive.web** devices may cause motors and machinery to power up with high Voltages or start or operate in an unexpected, dangerous or lethal way. It is essential that you are completely familiar with all of the equipment and the system design before attempting to program or edit a program or connect to any live device. It is also essential that a risk assessment is conducted to identify hazards. Risks must be reduced to tolerable levels.

**Warning!** You are entirely responsible for the configuration or use of any **drive.web** product. By configuring or using these products you agree to indemnify and hold harmless Bardac Corporation, its employees, directors, officers, distributors, and resellers against the consequences of your configuration or use of the products.

**Warning!** Information in this manual is subject to change without notice. You are responsible for verifying the proper operation of your **smarty**. Special care must be taken after loading new firmware or installing new options.

**Warning!** Avoid permanent damage to your **smarty**, never exceed any **min** or **max** values.

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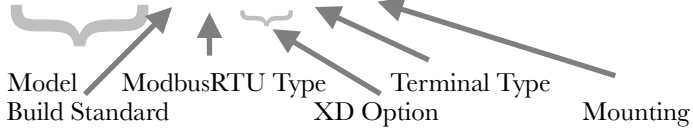
## Product Identification - *smarty*<sup>7</sup>-XD

The **XD** option adds sixteen digital inputs and sixteen digital input/outputs on **dw25x**-series universal automation controllers.

This option manual must be used in conjunction with the **dw25x** product manual, part number HG504266

The model number **dw25x** is appended with a three character extension.

Example; **dw250-DM-XDPD**



## Terminal Type **P**

**P** - Four plug-in screw-terminal blocks; 40 total terminals.

## **XD** Terminal Naming and Ratings

- Terminal names are consistent in the **drive.web savvy** software, on the terminal, and on the cover plate next to the terminal.

**24V - XD** option 24VDC supply for digital outputs. 25.2VDC max. The four terminals are internally connected but they are not connected to the 24V terminals on the **dw250** base. Typically a single jumper wire may be used but a separate supply is possible with a 0V common connection.

**External 1A fast-acting fuse or current-limiting is required!**

**0V** - 0V common reference. The four terminals are internally connected and to 0V terminals on the **dw250**.

**DO09 thru DO24 - XD** option digital output. 25.2VDC max.

DO09 thru DO16 can output 300mA max, shared. DO17 thru DO24 also share 300mA max. Resistive and general use. Overcurrent protection and software indication. Also configurable as digital inputs with 8VDC threshold and 3VDC hysteresis.

**DI09 thru DI24 - XD** option digital input. 30VDC max. 24V or 5V logic, or custom threshold. Hysteresis is +/-5% of the threshold.

## **XD** Terminal Wiring

Strip 7mm(0.28"). 1.5mm<sup>2</sup> (AWG16) max. One wire with ferrule, 0.8mm<sup>2</sup> (AWG18) maximum.

Tighten 0.5N•m (4.4in•lb)

Fast transient over-Voltage 1kV per EN 61000-4-4.

## **XD** Dimensions and Terminal Map

See **dw25x** product manual for other dimensions and terminals.

