

nCompass-DX Interface for Dixell CX Refrigeration Controls Specifications and Part Number Matrix September 2013

What is nCompass-DX?

The nCompass-DX is a 4.3" color touch screen interface connecting to a single Dixell Prime CX or XW60K control via the Dixell's optional XJ485-CX external module. nCompass-DX is compatible with the XW60K and CX Series (XR40CX, XR60CX and XR70CX) Dixell controllers.

The nCompass-DX system combines all of the features of the Dixell Prime CX and XW60K refrigeration controller with an embedded SCADA (supervisory control and data acquisition) into a single / intuitive to use device. LAN features include Email/SMS (text messaging) on alarm, FTP (file transfer protocol) and remote view/control (Web server/VNC server) are standard with nCompass and can be accessed via LAN/WAN using a PC, tablet or smart phone device.

nCompass-DX Applications

Applicable for any appliance controlled by a Dixell Prime CX or XW60K controls where flexible out-of-the box LAN capabilities and/or SCADA functions (data logging, alarm monitoring, operator audit trail, etc.) are required to meet internal Quality, Regulatory or HACCP protocols now or in the future.

nCompass-DX - an International Product

A truly international product, nCompass may be configured in any one of 28 languages providing ease of use almost anywhere in the world.

If you can use a "smart device" (iPhone, Android, etc.) you can use Compass-DX

nCompass-DX provides intuitive operation, user configurable with "**Smart Device**" user interface features similar to consumer smart devices (iPhone, iPad, Android, etc.) or configurable with a traditional drop down menu system. The intuitive operation requires less training and minimizes operator error. A Help icon on every page with "touch flow" finger scrolling provides the user content sensitive information for every function.

For the OEM, most of the nCompass-DX configuration is handled automatically matching the Dixell-CX and XW60K control configuration when connected. OEM specific runtime features (screen availability, menus, language, etc.) are easily configured to meet their requirements. The OEM configuration can be imported/exported to any other nCompass-DX device for setup (from scratch) within minutes.



How to Order

nCompass-DX is ordered as 2 components with optional power supply and connecting cable.

nCompass-DX Sample Part Numbers			
<i>(minimum of 3 component part numbers is required; (1) display, (2) firmware, (3) loop #1 with (4) loop #2 if required.) (dual loop shown)</i>			
<u>Item #</u>	<u>Product</u>	<u>Sample Part Number</u>	<u>Description</u>
1	Display	FDC-0450-1011-000BN	4.3" display, 11-36 VDC power input, SD slot, Ethernet, standard enclosure
2	LC Firmware	SD-DX	DX Loop Control Firmware (inserted into display SD slot)
Options			
Power Supply	PS5R-SD24		85-264VAC power input, Output 24VDC 15W (0.6A)
Cable	CA2011-3D		Cable from Display to the Dixell XJ485-CX connector, twisted pair leads, shielded (3-Meters)

Item #1	Model FDC - 0450 4.3" Color Touch Screen								
FDC - 0450 -	1	0	1	1	0	0	0	B	N
Order Matrix #	1	2	3	4	5	6	7	8	9
(1) Power Input 1: 11 to 36 VDC					(6) Software 0: None				
(2) Sound Output 0: None					(7) Enclosure 0: Standard				
(3) SD Card Slot 1: Yes					(8) Special B: Black Overlay				
(4) Ethernet 1: Yes					(9) Special N: Neutral Overlay (no name/logo)				
(5) Network 0: None									

Item #2:	Loop Control Firmware	
	Order Matrix #	SD - DX
(Fixed characters SD-LC: SD card with LC (Loop Control) Display Configuration and SD plugged into display)		

Control System Options *(ordered separately as appropriate)*

Cable: Display to Dixell XJ485-CX communication port

CA2011-3D: Cable (3 Meters) from Display to XJ485-CX.

Note: Consult factory for other lengths & options)

Display Power Supply (input 100-240VAC / Output 24VDC)

DIN Rail Mount: PS5R-SB24: 15W power supply (0.6A)

Open Frame: PS3X-B24AFC: 15W power supply (0.6A)

Note: Either of the above will power the FDC-0450 touch screen display

USB Memory Stick

UDF115-2GB: (2GB High Capacity USB Memory Stick (3VDC))

System Reset Timer

GE1A-C10MA110/SR2P-06: Reset Timer and socket (DIN Rail)

Note: Timer is recommended for proper system restart due to momentary power interruptions (<500ms) which can erroneous operation.

Printed Operators Manual

Part Number [\(Orion_nCompass_DX_i4.3_User_Manual.pdf\)](#)

FDC-Orion nCompass-DX i4.3 Installation and Operational Manual RevB.

Printed Communication Reference Manual

Part Number [\(Orion-nCompass_DX_i4.3_Comm_Reference.pdf\)](#)

FDC-Orion nCompass-DX i4.3 Communication Reference Manual RevB.

USB Cables & Accessories

IStick-Panel USB Panel Mount Adapter

IStick-4X-CVR USB Panel Mount Adapter-Nema4x

NOTES: SCADA (Supervisory Control & Data Acquisition)

FDC-nCompass Series Graphic User Interface (GUI) touch screen provides a full SCADA feature set providing ease of use with either an icon menu system with finger navigation or traditional Menu bar, data acquisition, alarm manager, operator audit trail, multi-level security with user rights, LAN connections and more.

The GUI provides ease of configuration, use & support.

- System Configuration for probe indication, alarms, Help, Language selection and more, all without an external device or PC.
- Control Views: view 1 or 2 probes in single or dual view as well as in a Trend format.
- File Management: View, print, copy/move Profile, Alarm, Historical Data (data log files) and operator audit trail files. File transfer via LAN features or USB flash memory.
- LAN: Remote Access & touch screen operation (VNC), email/SM on alarm, email historical, alarm & audit trail files on-demand, Web Page (view only) and FTP of alarm, audit and historical data files automatically or on-demand.

Data Acquisition:

- Data log PV for all probes, SP and compressor output on/off.
- Log interval: configurable 6 seconds to 31 minutes with configurable number of days to auto start & name next file (1 to 31 days).
- File Start/Stop: Configurable; operator on-demand, on system boot, profile ramp-soak start/end or digital inputs
- File Interval: Once started a data log file is configurable to auto end and start new file with the same name as previous file with an appended time/date name. Configurable time interval is from 1 to 31 days.
- File name: Operator entered file name, batch & lot number or If running a profile, file name same as profile name. (all file names appended with date-time to file name)
- Operator Comments/Events: Unlimited operator comments/events linked to each file entered manually or via Bar Code Scanner.
- Digital Signatures: full support for user based digital signatures for each data file (data encryption).
- Historical Data File: View & print the data directly from the Display (auto scale on X & Y axis with each channel selectable for right or left axis values), from a PC after data is copied/moved via LAN (FTP or email) or USB Flash Memory card provided.

NOTES: Power Supply - Optional

Power Capacity Required (Watts) - A base system requires ~10 watts of 24Vdc power for the nCompass user interface. The 15W power supplies offered are sufficient to power display only.

Note: The power supply should be used to power nCompass components only and not OEM or other end user components or devices.

NOTES: Language Configuration

nCompass provides a one-button language configuration for the following languages.

- Afrikaans
- Albanian
- Arabic
- Basque
- Belarusian
- Chinese – Simplified
- Chinese – Traditional
- Czech
- Danish
- Dutch
- English
- Finnish
- French
- German
- Greek
- Hebrew
- Hungarian
- Icelandic
- Italian
- Japanese
- Korean
- Norwegian
- Polish
- Portuguese
- Russian
- Spanish
- Swedish
- Turkish

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