SIEMENS

Smart Infrastructure
Building Products

Product Line: Desigo Products	**Distribution:** Multichannel	**Date:** August 2019

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Dual Duct Application for DXR Hardware
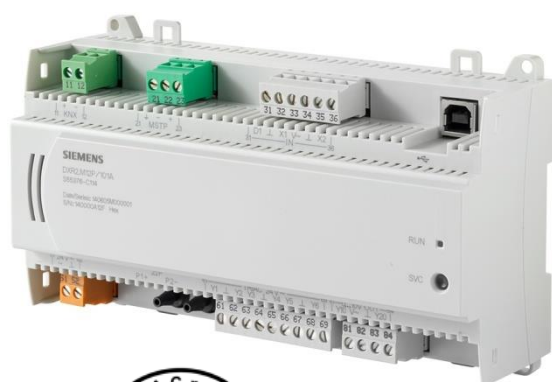
Product Description

The new Dual Duct application for the existing DXR hardware is now available!

Standard HVAC applications supporting Variable Air Volume, Constant Volume, Fan Coil, Unit Vent, Heat Pump, and Chilled Beam have been available on this hardware platform for the Americas market. Out of the box, the Desigo DXR contains these standard, pre-loaded applications (now with Dual Duct), that are highly configurable to meet your job's unique sequence of operations.

Unique Selling Points

- Room automation station combining Dual Duct application for HVAC, along with lighting and shading for Total Room Automation (TRA)
- Flexible and highly configurable applications to meet customer requirements, eliminating the need for custom programming for every implementation
- KNX PL-Link bus to connect sensors, actuators, and room operator units

Reason for Release

The new Dual Duct application for the existing DXR hardware is now available!

List of Key Product Features

- Cool air duct, Hot air duct with configurable ventilation delivery
- Dual Duct, dedicated ventilation duct with hot water or electric heating coils
- Dual Duct with constant volume option

Sales Release

Name	Dual Duct Application for the DXR
Delivery Release/Orders Accepted Date (month)	August 2019
Delivery Time/Lead Time	Shipping by Mid-August / Available through SAP.
Sales Channels/Regions Where Product is Sold	U.S., Canada, Asia Pacific, Latin America, and the United Kingdom
Price Information	Please refer to the reference price information in the current price list.
Embargo Designator (ECCN, AL, …)	EAR99

References

Sales Documentation

Document	Part Number	Comments
Desigo DXR Controllers – Product Overview	A6V11238549	Available Electronically

Product Documentation

Document	Part Number	Comments
DXR2.M12P Submittal Sheet	A6V10502838	Available Electronically
DXR2.E12P Submittal Sheet	A6V10502844	Available Electronically
ADXR MS/TP Submittal Sheet	A6V11339448	Available Electronically
ADXR IP Submittal Sheet	A6V11339446	Available Electronically
VAV Application Type Startup Procedures	A6V10665935	Available Electronically
14064 - Dual Duct Variable Volume with Dedicated Ventilation Duct, Two Inlet Sensors, DCV and Hot Water Heat with Supply Temp Control (on DXR2.x12)	A6V11692042	Available Electronically
14069 / 14169 / 14369 - Dual Duct Variable Volume with Two Inlet Sensors (on DXR2.x12 and ADXR)	A6V11692053	Available Electronically
14269 - Dual Duct Variable Volume with Two Inlet Sensors, 2-Stage Electric Heat, Chilled Ceiling and Hot Water Radiator (on DXR2.x18)	A6V11692055	Available Electronically
QMX3 Room Unit Data sheet	149-151	Available Electronically
QMX2 Data Sheet	A6V11207411	Available Electronically
Semi-Flush Mount Sensor for DXR	149-603	Available Electronically

Product Description

The family of Desigo DXR controllers has just been enhanced by supporting the new Dual Duct application. Please note that an off-board differential pressure sensor will be required because the standard DXR controllers (E/M12P and E/M10PL) only have the one on-board differential pressure sensor.
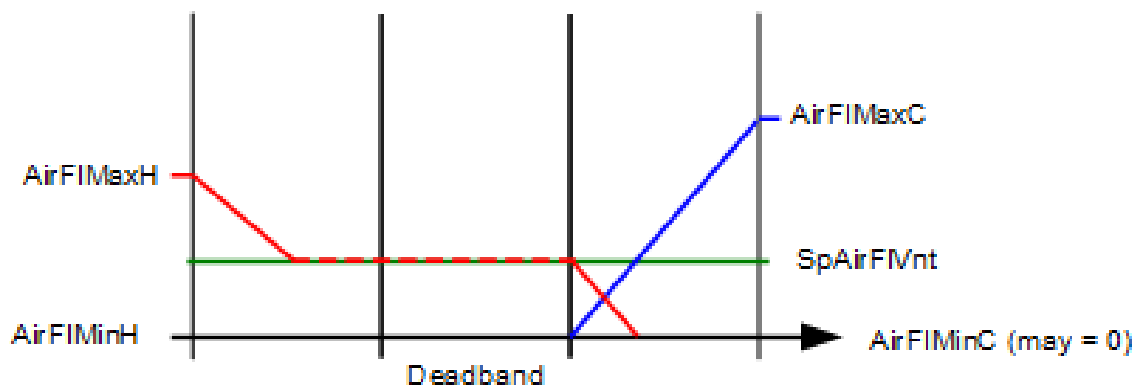
The following use cases are supported:

Use case 1: VAV DD - Ventilation source in one duct
 1a - Ventilation in cold duct (Duct 1)
 1b - Ventilation in hot duct (Duct 2)

Use case 2: VAV DD - Ventilation in both ducts, with mixing control
 2a - Cold duct ventilation in dead band
 2b - Hot duct ventilation in dead band
 2c - Last duct ventilation in dead band

Image: Use Case 2b – VAV DD with ventilation in both ducts, hot duct ventilation in dead band, with mixing control

Use case 3: VAV DD - Ventilation in both ducts, snap acting control
 3a - Cold duct ventilation in dead band
 3b - Hot duct ventilation in dead band
 3c - Last duct ventilation in dead band

Use case 4: VAV DD - Dedicated duct for ventilation from DOAS (dedicated outside air system)

Use case 5: Constant volume DD option - Ventilation in both ducts, with mixing control
 5a - Cold duct ventilation in dead band
 5b - Hot duct ventilation in dead band

The above use cases, visual examples, and additional details are all documented in the VAV Application Type Startup document.

There are five default Dual Duct DXR application templates that are available:

Application Numbers	Description	Hardware Type
14064	Dual Duct Variable Volume with Dedicated Ventilation Duct, Two Inlet Sensors, DCV and Hot Water Heat with Supply Temp Control	DXR2 (E12P / M12P)
14069	Dual Duct Variable Volume with Two Inlet Sensors, Modulating Electric Heat and Hot Water Radiator	DXR2 (E12P / M12P)
14169	Dual Duct Variable Volume with Two Inlet Sensors, DCV, Modulating Electric Heat and Hot Water Radiator	DXR2 (E12P / M12P)

| 14269 | Dual Duct Variable Volume with Two Inlet Sensors, 2-Stage Electric Heat, Chilled Ceiling and Hot Water Radiator | DXR2 (E18 / M18) |
| 14369 | Dual Duct Variable Volume with Two Inlet Sensors, Hot Water Heat and 1-Stage Electric Radiator | ADXR (E10 / M10) |

Features, Functions and Benefits

Features	Functions	Benefits
Preloaded Standard Applications	Time tested standard applications meet most customer specifications.	High quality preloaded applications provide assurance that reduces the need for customizing the application.
Highly Configurable	Configurable applications using the ABT Site tool to meet a wide range of sequences	Configuration flexibility reduces the need to create custom programming for the device to meet many unique customer specifications
Flexible Inputs and Outputs	Digital and analog outputs along with universal inputs provide support for multiple sensing types.	More flexible option, if and when, new components (e.g., sensors, actuators) need to be replaced as well as the legacy room controller
BACnet MS/TP and BACnet IP Communication	Multiple communication protocols supported to meet performance requirements and customer preferences.	Meets market needs for a robust BACnet MS/TP solution when specified, but also offers a high performance, IT friendly solution (BACnet IP) when controlling lights and shades with your secondary equipment (room) controller.
Communication Room Bus (PL Link)	Provides a 2-wire power and communication network to multiple devices with free-topology.	Ability to have multiple room units connected along with lighting and blind modules for TRA opportunities.
Total Room Automation	Ability to support HVAC, lighting and blind applications in one room automation controller	Provides lower installed and lifecycle costs along with investment protection for the customer while providing a more comfortable and greater user experience.

Technical Data

Please see the datasheets for the complete list of technical information.

Migration Sales Strategy

New Systems

The Desigo BACnet DXR family of controllers released in October of 2015 is the controller of choice for new installations. It supports a wide range of applications, including the Dual Duct application we are announcing today. Plus, new features and engineering efficiencies are being added on a regular basis.

Existing Systems

We understand that there is a huge base of loyal customers that need to be supported with our latest product solutions. The Dual Duct application on the Desigo DXR hardware provides you another option for your customers as they retrofit older hardware and move forward with either one of our BACnet IP or BACnet MS/TP offerings.

Compatibility

Dual Duct DXR Product Compatibility	
Management Level	Desigo CC 2.1 and later
Automation Level	Field Panel Web server Firmware 3.4 or later
Field Level	QMX… Room Units

ABT Site Version	App. Library Version	DXR/FW Version
3.3.1	2.12.0.002	01.21.50.128

Estimating

These parts are already supported in our online pricing documents and estimating tools as we are only adding application support to existing DXR hardware. As mentioned above, the need for an off-board differential pressure sensor will be required as the existing hardware only has one onboard sensor.

Order Information and Pricing

Please note the ordering information listed below is primarily for our international customers as they update their SAP systems with the latest product information. Always refer to your current price list for the most up to date pricing information.

Product Description	Orderable Part Number	Model Number (SSN)	US List Price	Mult.	GBK	ESN	Weight of Unit	Product Length/ Width/ Height
Actuating DXR (ADXR) on BACnet MS/TP	DXR2.M10PL-102B	S55376-C147	$856.19	A	H5EO	ONB	1.5 lb (470g)	7.9" x 5.4" x 3.2" (201 x 137 x 81 mm)
Actuating DXR (ADXR) on BACnet MS/TP – supports 60 data points	DXR2.M10PLX-102B	S55376-C148	$967.49	A	H5EO	ONB	1.5 lb (470g)	7.9" x 5.4" x 3.2" (201 x 137 x 81 mm)
Actuating DXR (ADXR) on BACnet IP	DXR2.E10PL-102B	S55376-C145	$856.19	A	H5EO	ONB	1.5 lb (470g)	7.9" x 5.4" x 3.2" (201 x 137 x 81 mm)
Actuating DXR (ADXR) on BACnet IP – supports 60 data points	DXR2.E10PLX-102B	S55376-C146	$967.49	A	H5EO	ONB	1.5 lb (470g)	7.9" x 5.4" x 3.2" (201 x 137 x 81 mm)
DXR2.M12P Room Automation Station	DXR2.M12P-102B	S55376-C123	$769.93	A	H5EO	ONB	10.5 oz. (300g)	7.2" x 4.2" x 2.6" (183 x 106 x 65 mm)
DXR2.M12P Room Automation Station with 60 Data Points for TRA	DXR2.M12Px-102B	S55374-C251	$870.35	A	H5EO	ONB	10.5 oz. (300g)	7.2" x 4.2" x 2.6" (183 x 106 x 65 mm)
DXR2.E12P Room	DXR2.E12P-102B	S55376-C126	$769.93	A	H5EO	ONB	10.5 oz. (300g)	7.2" x 4.2" x 2.6"

Automation Station								(183 x 106 x 65 mm)
DXR2.E12P Room Automation Station with 60 Data Points for TRA	DXR2.E12Px-102B	S55374-C251	$870.35	A	H5EO	ONB	10.5 oz. (300g)	7.2" x 4.2" x 2.6" (183 x 106 x 65 mm)
DXR2.M18 Room Automation Station	DXR2.M18-101B	S55376-C124	$811.83	A	H5EO	ONB	10.5 oz. (300g)	7.2" x 4.2" x 2.6" (183 x 106 x 65 mm)
DXR2.E18 Room Automation Station	DXR2.E18-101B	S55376-C125	$811.83	A	H5EO	ONB	10.5 oz. (300g)	7.2" x 4.2" x 2.6" (183 x 106 x 65 mm)

Please use the Orderable Part number for ordering through SAP.

Support

	Domestic Orders	International Orders
Order information	Contact: Your Dedicated Solutions Support Specialist Phone: 1-800-516-9964 Email: Your Dedicated Solutions Support Specialist	Contact: Your Dedicated Solutions Support Specialist Phone: 1-847-941-5050 Email: Your Dedicated Solutions Support Specialist
Return Items	Contact: Your Dedicated Solutions Support Specialist Phone: 1-800-516-9964 Email: Your Dedicated Solutions Support Specialist Physical Return: Siemens Industry Smart Infrastructure 1000 Deerfield Parkway Buffalo Grove, IL 60089	Contact: Your Dedicated Solutions Support Specialist Phone: 1-847-941-5050 Email: Your Dedicated Solutions Support Specialist Physical Return: Siemens Industry Smart Infrastructure 1000 Deerfield Parkway Buffalo Grove, IL 60089