SIEMENS

DXR Actuator Package

DXR2.M12P and GDE131.1U

The DXR Actuator Package pairs a terminal equipment controller (DXR) with a GDE131.1U Actuator on a common plate. It is a low cost solution for field applications requiring VAV or CV applications with an electronic actuator.

- Pre-assembled package.
- Reduced installation time.
- Reduced cost.

Features

The DXR/Actuator Package reduces installation time, and therefore cost, by providing the Field Installer a pre-assembled package that mounts in less time than what is required to separately mount the components.

Technical Design

Components

- DXR Controller (DXR2.M12P)
- GDE Actuator (GDE131.1U)
- Mounting plate (550-009A)

Type summary

Product	Description	
	DXR	Actuator
DXR2.M12P-102B-GDE	DXR2.M12P*	GDE131.1U*

Accessories

Product	Description
550-002	Large Equipment Controller Enclosure
DXA.H180	Terminal cover DIN housing
985-124	499 OHM Resistor Assembly Kit
SP386A	USB Isolator

Product documentation

Topic	Title	Document ID:
DXR Installation	DXR Installation Instruction	A6V10550039
GDE Actuator Installation	OpenAir™ Electric Damper Actuator	155-188P25

Related documents such as environmental declarations, CE declarations, etc., can be downloaded at the following Internet address:

http://siemens.com/bt/download

Actuator Technical Data

Power supply

Power supply	
Operating voltage	24 Vac +15%, -15%
Frequency	50/60 Hz.
Power consumption including connected field devices	2.3 VA

Functional data

AC 24 V supply for field devices	
Output power	Max. 4 VA total
Protection against overload	Power limitation internal, max. 250 mA, resetting.

Environmental compatibility

Function	
Torque	44 lb-in (5 Nm)
Runtime for 90° opening or closing	90 sec. At 60 Hz (108 sec. At 50 Hz)
Nominal angle of rotation	90°
Maximum angular rotation	95°

Standards, directives and approvals	
Equipment Rating	UL—Class 2, CSA Class III per EN60730

Dimensions	259 (10.2) x 168 (6.6) x 93 (3.7)
Weight	1.0 kg (2.1 lbs)

Power data

Power supply	
Operating voltage	AC 24 V -15%/+20%
Frequency	50/60 Hz
Internal fuse 4 A irreversible	Transformer with secondary current limitation of max. 10 A or external secondary current fuse
Non-renewable fuse	Circuit breakers

Apparent power (VA) for transformer design						
	Base load including I/O without load by field devices	Max. output load Triac at 250 mA each	Max. load for AC 24 V field supply at 250 mA	Max. load KNX PL-Link at 50 mA	Max. load for DC 24 V field supply at 100 mA	Power consumption including connected field devices
DXR2.M12P..	6	6 x 6 = 36 (72 with PWM *)	12	4	-	58 (94 with PWM *)

Inputs

Analog Inputs		
Resistance sensor	Temperature measurement	Voltage measurement
AI 1000 Ω	AI PT1K 375	AI 0 to 10 V
AI 2500 Ω	AI PT1K 385	AI 0 to 10 V (0 to 100%)
AI 10 KΩ	AI Ni1000*	
AI 100 KΩ	AI Ni1000 DIN	
	AI NTC3K	
	AI NTC10K*	
	AI NTC100K*	

*) Configurable default.

Digital Inputs	
Contact voltage	DC 17 V typical
Contact current	1.5 mA typical, 7 mA initial current
Contact resistance for closed contacts	Less than 100 Ω
Contact resistance for open contacts	Greater than 50 KΩ

Differential pressure sensor	
Connections (nipple diameter)	Dia. 5.2 mm (0.20 in)
Measuring range	0 to 500 Pa (0 - 2.01 in WC)
Overload range	0 to 100 kPa (0 - 402 in WC)

Outputs

Analog Outputs	
0 to 10 V	1.5 mA maximum

Digital Outputs	
Type (Switching outputs triacs)	High side The Triac closes the contact to AC 24 V
Switching voltage	AC 24 V
Permissible load	250 mA / 6 VA per output
Protection	Short-circuit proof

AC 24V outputs for field devices (2: V~)	
Output voltage	AC 24 V
Permissible load	500 mA/12 VA overall
Protection against overload	Short-circuit proof

Conformity

⚠ CAUTION

National safety regulations

Failure to comply with national safety regulations may result in personal injury and property damage

- Observe national provisions and comply with the appropriate safety regulations.

Ambient conditions and protection classification	
Climatic ambient conditions	
• Transport and Storage	• Temperature -25...70 °C (-13... 158°F) Air humidity 5...95% rh.
• Operation	• Temperature -5...50 °C (23... 122 F) Air humidity 5...95% rh.

Standards, directives and approvals	
UL Listing Federal Communications Commission	UL916, http://database.ul.com cUL as per CSA – C22.2 No. 205 FCC CFR 47 Part 15 Class B
Environmental compatibility - RoHS Compliant	The product environmental declaration contains data on environmentally compatible product design and assessments (composition, packaging, environmental benefit, disposal).
BACnet BTL Listing	BTL-ASC
Quality	ISO 9001 (Quality).

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