

DO-FA-12 and DO-FA-12-H

SpaceLogic[™] Plant Room Controllers

EcoStruxure[™] Building



12-channel Form A digital output I/O modules

Introduction

SpaceLogic* DO-FA-12 and DO-FA-12-H Central IO modules are digital output 12-channel I/O modules.

The digital outputs support digital Form A point types. The Form A relays are designed for direct load applications.

* Formerly known as SmartX.

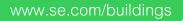
Function

Modular and scalable system

The modules are part of a modular system that delivers power and communications on a common bus. Connecting modules is a one-step process: just slide the modules together using the built-in connectors.

Patented two-piece design

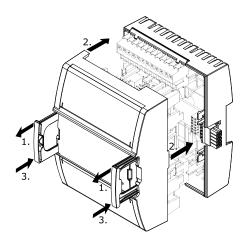
Each module can be separated from its terminal base to allow the site to be wired prior to the installation of the electronics. The patented locking mechanism serves as handles for removing the





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module from its base. All critical components have a protective cover that permits convection cooling to occur.



Two-piece design

Hot-connect and Hot-swap

Because critical applications require 24-hour operation, Schneider Electric designed the Central IO modules for hotconnection of terminal bases and hot-swapping of the modules to their bases. This design ensures continuous power and communication during service operations.

Auto-addressing

The auto-addressing feature helps eliminating the need for setting DIP switches or pressing commission buttons. Each module automatically knows its order in the chain and assigns itself accordingly – significantly reducing engineering and maintenance time.

Simple DIN-rail installation

Fasteners easily snap into a locked position for panel installation. The fastener has a quick-release feature for easy DIN-rail removal.

Efficient terminal management

The Central IO module terminals are clearly labeled and protected by transparent covers. The input and output terminals are at the top and bottom of each module and are accessible for maintenance without removing the module. The EcoStruxure Building Operation WorkStation software can generate custom as-built labels for each module. Pre-perforated letter and A4 size label sheets are available as an accessory.

Accommodates multiple row panel installations

The SpaceLogic devices use built-in connectors for single row connectivity, side by side. If a panel size requires multiple rows, extension cords are available.

LED status indicators

The Central IO module has a status indicator that denotes the health and status of the module.

Each digital output channel has a dedicated status indicator using a green LED.

Hand/Off/Auto switches

The front panel of the DO-FA-12-H includes Hand/Off/Auto (HOA) switches to provide override control of the digital outputs.

The position of the HOA switch is readable through user interfaces, such as the EcoStruxure Building Operation WorkStation software, enabling more precise monitoring and control.

Specifications

DO-FA-12 and DO-FA-12-H	
Output channels	12
DC input supply power	1.8 W
DC input supply voltage	24 VDC
Environment	
Ambient temperature, operating	0 to 50 °C (32 to 122 °F)
Ambient temperature, storage	-20 to +70 °C (-4 to +158 °F)
Maximum humidity	95 % RH non-condensing
Material	
Plastic flame rating	UL94-5VB
Enclosure	PC/ABS

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Ingress protection rating

Dimensions including terminal base 90 (3.6) mm 114 (4.5) (in.)

Weight including terminal base

Weight excluding terminal base Terminal base RCM; BS/EN 61000-6-3; FCC Part 15, Sub-part B, Class B Emission Immunity Safety standards Product

Smoke control product safety

DO-FA-12, Central IO module 12 Form A digital outputs SXWDOA12X10001 DO-FA-12-H, Central IO module with HOA switches 12 Form A digital outputs with Hand/Off/Auto override switches SXWDOA12H10001 TB-IO-W1, terminal base for Central IO module SXWTBIOW110001 (Required for each Central IO module) DIN-RAIL-CLIP, DIN-rail end clip package of 25 pieces SXWDINEND10001 PRINTOUT-A4-W1, printout sheets for terminal labels A4 sheet size, 100 sheets, 18 labels per sheet SXWTERLBL10011 PRINTOUT-LTR-W1, printout sheets for terminal labels SXWTERLBL10012 Letter sheet size, 100 sheets, 16 labels per sheet S-CABLE-L, S-cable extension cord for the I/O bus, L shaped connectors

1.5 m

SXWSCABLE10002

64 (2.5) -

90 W x 114 H x 64 D mm (3.6 W x 4.5 H x 2.5 D in.)

IP 20

0.317 kg (0.70 lb)

0.194 kg (0.43 lb)

BS/EN 61000-6-2

BS/EN 61326-1

UL 864

BS/EN 61010-1; UL 916 C-UL US Listed

TB-IO-W1

DO-FA-12 and DO-FA-12-H

S-CABLE-L, S-cable extension cord for the I/O bus, L shaped connectors 0.75 $\rm m$

SXWSCABLE10003

12345678910111200 <t< th=""><th>Digital outputs</th><th></th></t<>	Digital outputs	
Image: constant of the system groundImage: constant of the system groundImage		
Switch typeForm A Relay Single Pole Single Throw Normally OpenIsolation contact to system ground3000 VACCycle life (Resistive load)At least 100,000 cyclesMinimum pulse width100 msLED polarity energized relayOn	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
Single Pole Single Throw Normally OpenIsolation contact to system ground3000 VACCycle life (Resistive load)At least 100,000 cyclesMinimum pulse width100 msLED polarity energized relayOn	Contact rating	250 VAC/30 VDC, 2 A, Pilot Duty (Power Factor 0.35)
Cycle life (Resistive load)At least 100,000 cyclesMinimum pulse width100 msLED polarity energized relayOn	Switch type	Single Pole Single Throw
Minimum pulse width100 msLED polarity energized relayOn	Isolation contact to system ground	3000 VAC
LED polarity energized relay On	Cycle life (Resistive load)	At least 100,000 cycles
	Minimum pulse width	100 ms
LED polarity non-energized relay	LED polarity energized relay	On
	LED polarity non-energized relay	Off
LED color Green	LED color	Green

For protection from excess current that could be produced by field wiring, see the SpaceLogic Hardware Reference Guide.

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Regulatory Notices

FC

Federal Communications Commission FCC Rules and Regulations CFR 47, Part 15, Class B This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference. (2) This device must accept any interference received, including interference that may cause undesired operation.

Industry Canada This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

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Regulatory Compliance Mark (RCM) - Australian Communications and Media Authority (ACMA) This equipment complies with the requirements of the relevant ACMA standards made under the Radiocommunications Act 1992 and the Telecommunications Act 1997. These standards are referenced in notices made under section 182 of the Radiocommunications Act and 407 of the Telecommunications Act.

UK CA

UK Conformity Assessed S.I. 2016/1091 - Electromagnetic Compatibility Regulations 2016 S.I. 2016/1101 - Electrical Equipment (Safety) Regulations 2016 S.I. 2012/3032 - Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 S.I. 2013/113 - Waste Electrical and Electronic Equipment Regulations 2013 This equipment complies with the rules, of the UK regulations, for governing the UKCA Marking for the United Kingdom specified in the above directive(s).

CE CE - Compliance to European Union (EU) 2014/30/EU Electromagnetic Compatibility Directive 2014/35/EU Low Voltage Directive 2011/65/EU Restriction of Hazardous Substances (RoHS) Directive 2015/863/EU amending Annex II to Directive 2011/65/EU This equipment complies with the rules, of the Official Journal of the European Union, for governing the Self Declaration of the CE Marking for the European Union as specified in the above directive(s).

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WEEE - Directive of the European Union (EU)

This equipment and its packaging carry the waste of electrical and electronic equipment (WEEE) label, in compliance with European Union (EU) Directive 2012/19/EU, governing the disposal and recycling of electrical and electronic equipment in the European community.

CULUSTED US

UL 916 Listed products for the United States and Canada, Open Class Energy Management Equipment. UL file E80146.

UL 864 Listed products for the United States. 10th Edition Smoke Control System. UL file S5527.

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