

ABB MEASUREMENT & ANALYTICS | DATA SHEET

Analog output module

XSeries, RMC, and XIO



Overview

The 2100415 TFIO module is a configurable 4 channel, 4 to 20 mA analog output module. Each point can be configured to either sink or source a 4 to 20 mA signal using either an internal or external power source.

Point specifications

Electrical (each point)

Maximum allowable voltage range on VDC source, current sink or source is 26.5VDC (VDC common is essentially System Ground).

Maximum external power source

26.5 VDC

Minimum load resistance

(internal / external powered) 0 Ohms

Maximum load resistance

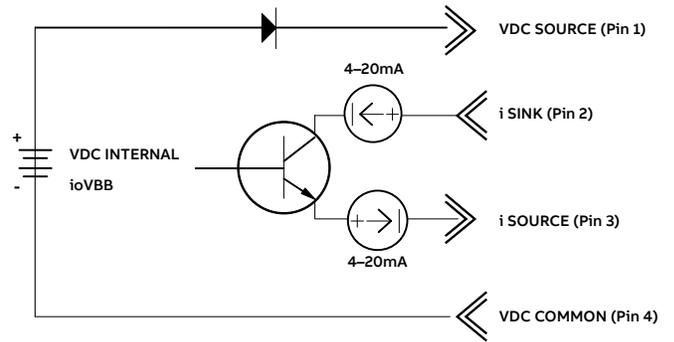
(internally powered) 350 Ohms

Maximum load resistance RMAX

(Calculated)

$(VDC\ External - 4.0) \times 50.0$

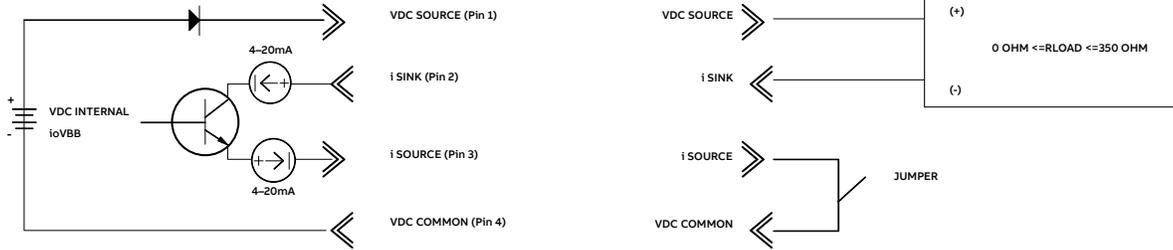
Typical point schematic



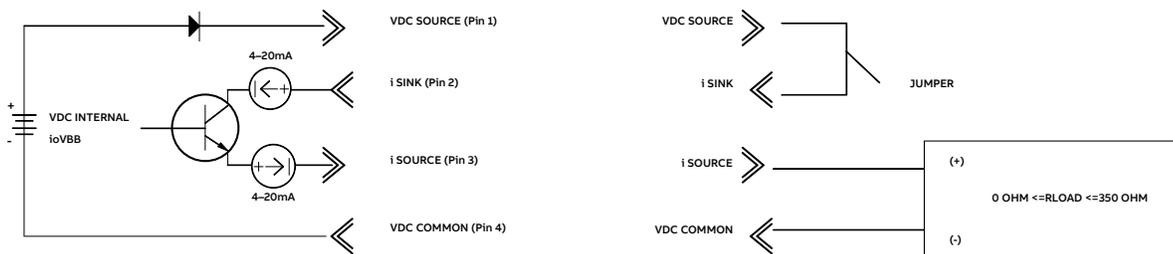
TFIO analog input (type II) module pin designation				
	J1	J2	J3	J4
1	AO1 VDC source	AO2 VDC source	AO3 VDC source	AO4 VDC source
2	AO1 Isink	AO2 Isink	AO3 Isink	AO4 Isink
3	AO1 Isource	AO2 Isource	AO3 Isource	AO4 Isource
4	AO1 VDC common	AO2 VDC common	AO3 VDC common	AO4 VDC common

Example connections

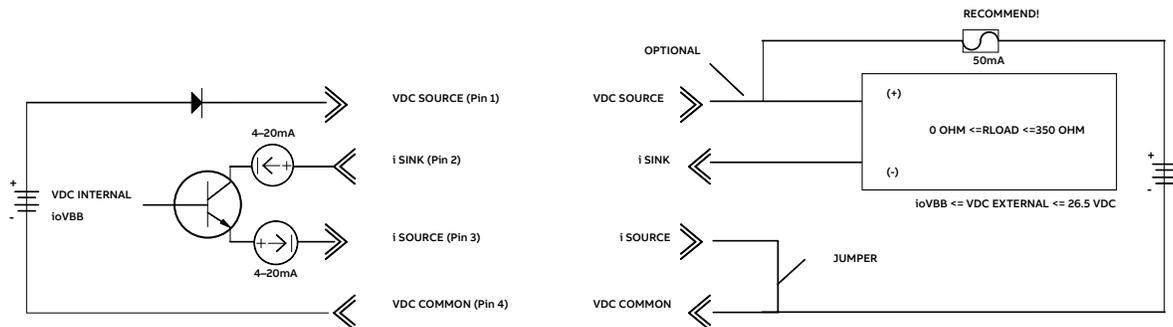
POWER SUPPLY: TFIO MODULE CURRENT SINK MODE



POWER SUPPLY: TFIO MODULE CURRENT SOURCE MODE



POWER SUPPLY: EXTERNAL CURRENT SINK MODE



POWER SUPPLY: EXTERNAL CURRENT SOURCE MODE

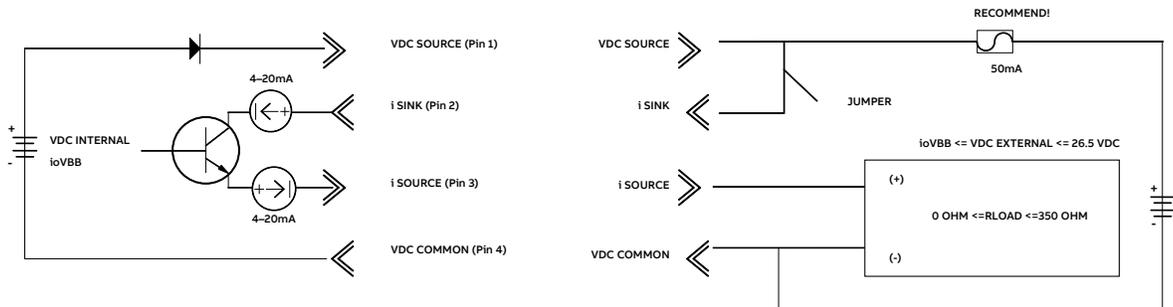




ABB Inc.**Measurement & Analytics**Quotes: totalflow.inquiry@us.abb.comOrders: totalflow.order@us.abb.comTraining: totalflow.training@us.abb.comSupport: totalflowsupport@us.abb.com
+1 800 442 3097 (opt. 2)**Main Office**

7051 Industrial Boulevard

Bartlesville, OK 74006

Ph: +1 918 338 4888

www.abb.com/upstream**Kansas Office**

2705 Centennial Boulevard

Liberal, KS 67901

Ph: +1 620 626 4350

Texas Office – Odessa

8007 East Business 20

Odessa, TX 79765

Ph: +1 432 272 1173

Texas Office – Houston

3700 West Sam Houston

Parkway South, Suite 600

Houston, TX 77042

Ph: +1 713 587 8000

Texas Office – Pleasanton

150 Eagle Ford Road

Pleasanton, TX 78064

Ph: +1 830 569 8062

We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB.

© Copyright 2020 ABB. All rights reserved.