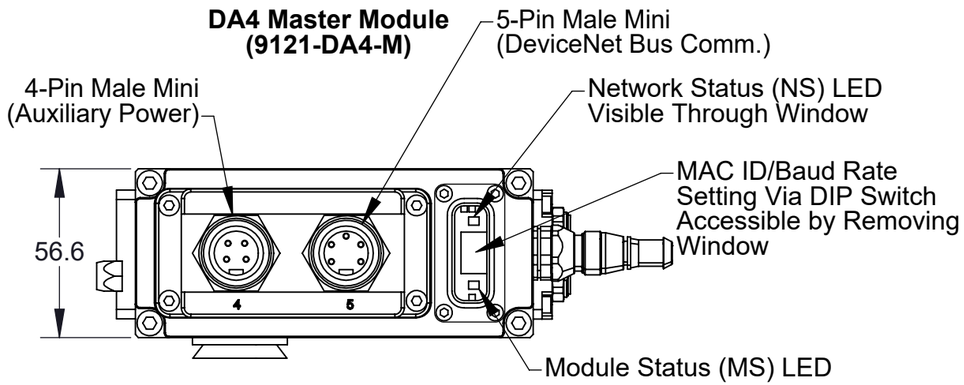
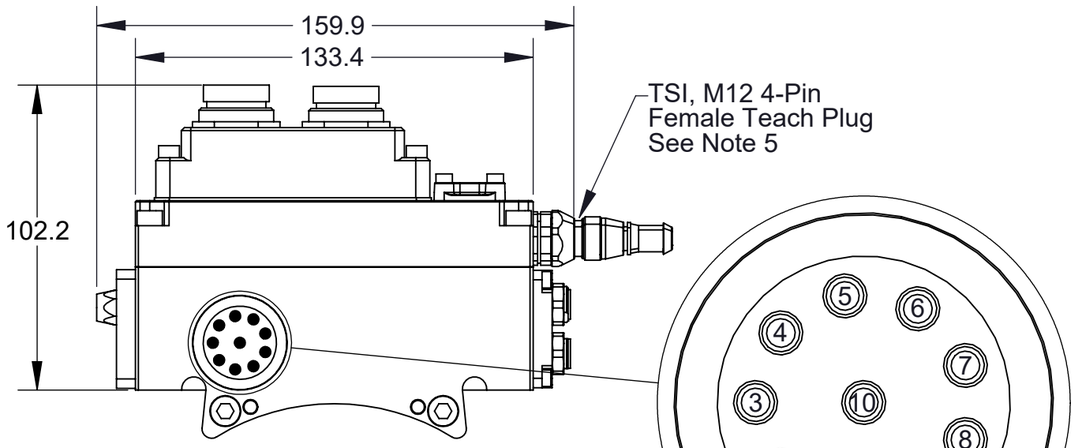
Rev.	Description	Initiator	Date
07	ECO 21749: Updated to show changes to Tool ID Window, injection molded.	BAW	3/2/2026

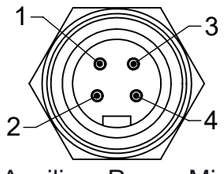
Notes:
1. The modules are shown at sheet scale. All connector face views are shown at a 1:1 scale, except as noted.
2. The 9121-DA4-M module supports the use of a mechanical limit switch for integration with the TSI feature (refer to Sheet 3).
3. Aux (4-Pin) and Bus (5-Pin) Connectors are oriented as shown on the Modules.
4. The DA4 Master module supports double solenoid valves.
5. Teach Plug is not connected to the Tool Stand Interlock (TSI) connector. Item is bagged separately.

DA4 Master Module
(9121-DA4-M)

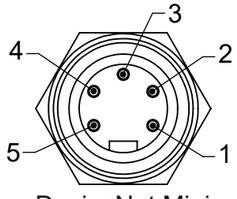




Master Pin Block



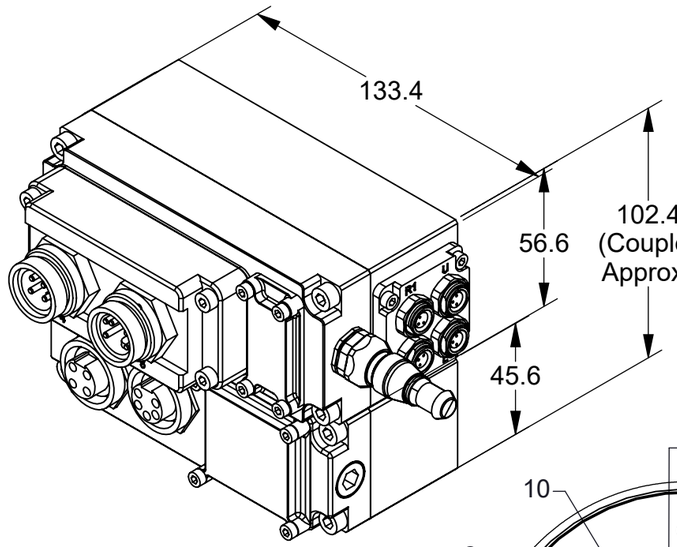
Auxiliary Power Mini
4-Pin Male, Turck RSFL 46



DeviceNet Mini
5-Pin Male, Turck RSFL 56

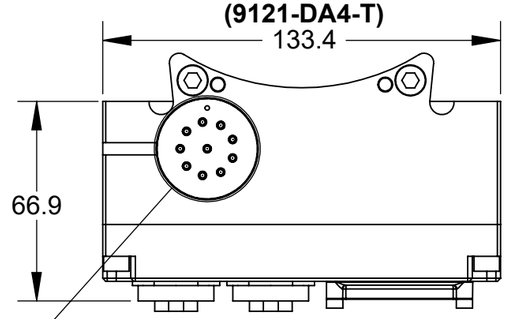
Auxiliary Power Connector	
1	Aux 1 V+
2	Aux 2 V+
3	Aux 2 V-
4	Aux 1 V-

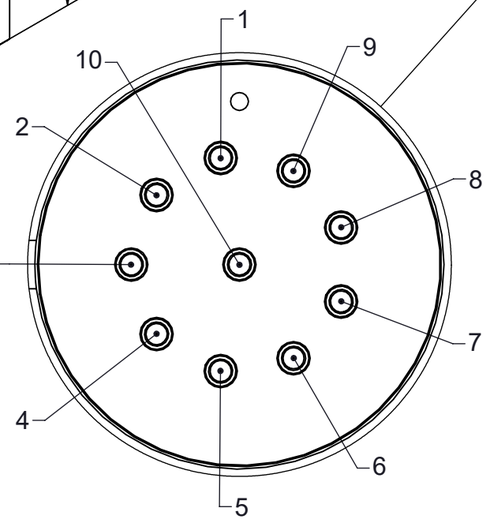
DeviceNet Connector	
1	Drain
2	CAN V+
3	CAN V-
4	CAN_H
5	CAN_L



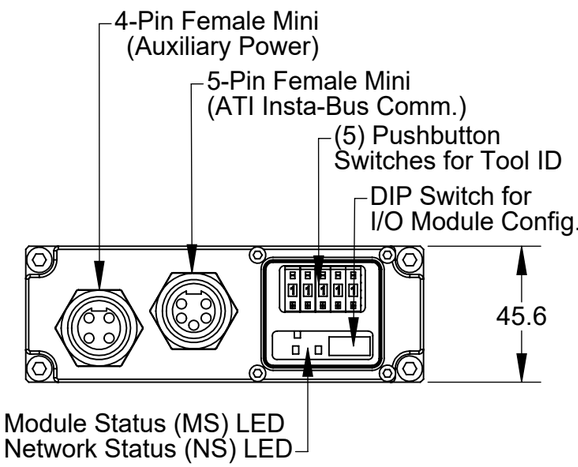
Pin	Description
1	CAN V+
2	CAN_L
3	CAN_H
4	Arc Switch Enable
5	Drain
6	AUX1 V+
7	AUX2 V+
8	AUX1 V-
9	AUX2 V-
10	CAN V-

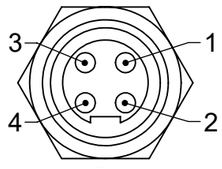
DA4 Tool Module
(9121-DA4-T)



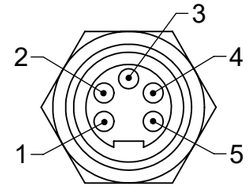


Tool Pin Block





Auxiliary Power Mini
4-Pin Female, Turck RKFL 46
(See Table Lower Left)



DeviceNet Mini
Female, Turck RKFL 56
(See Table Lower Left)

NOTES: UNLESS OTHERWISE SPECIFIED.

DO NOT SCALE DRAWING. ALL DIMENSIONS ARE IN MILLIMETERS.

3rd ANGLE PROJECTION

ATI INDUSTRIAL AUTOMATION

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Tel: +1.919.772.0115 www.ati-ia.com
Fax: +1.919.772.8259 ISO 9001 Registered Company

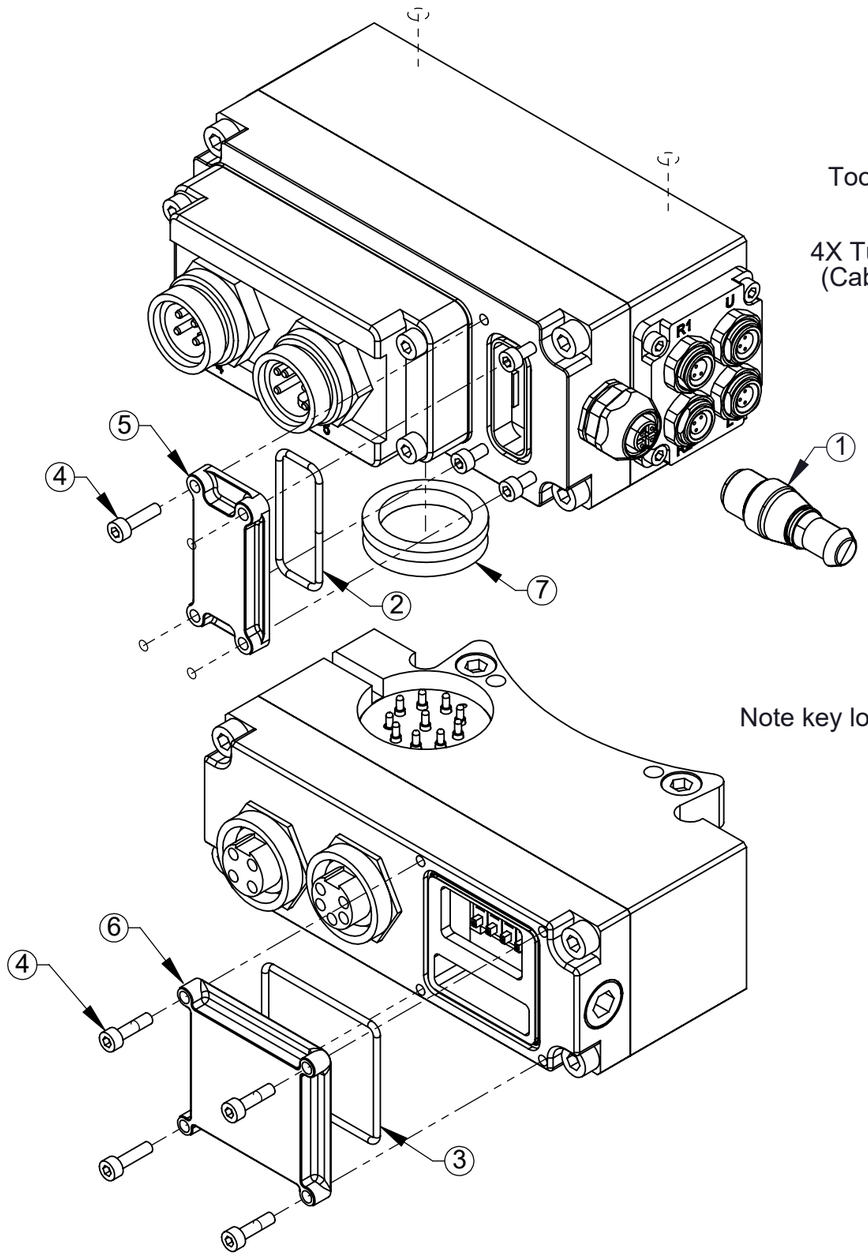
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DRAWN BY: W. Berrocal, 2/21/14
CHECKED BY: M. Hallmark, 4/7/14
PROJECT # 110727-1 SHEET 1 OF 3

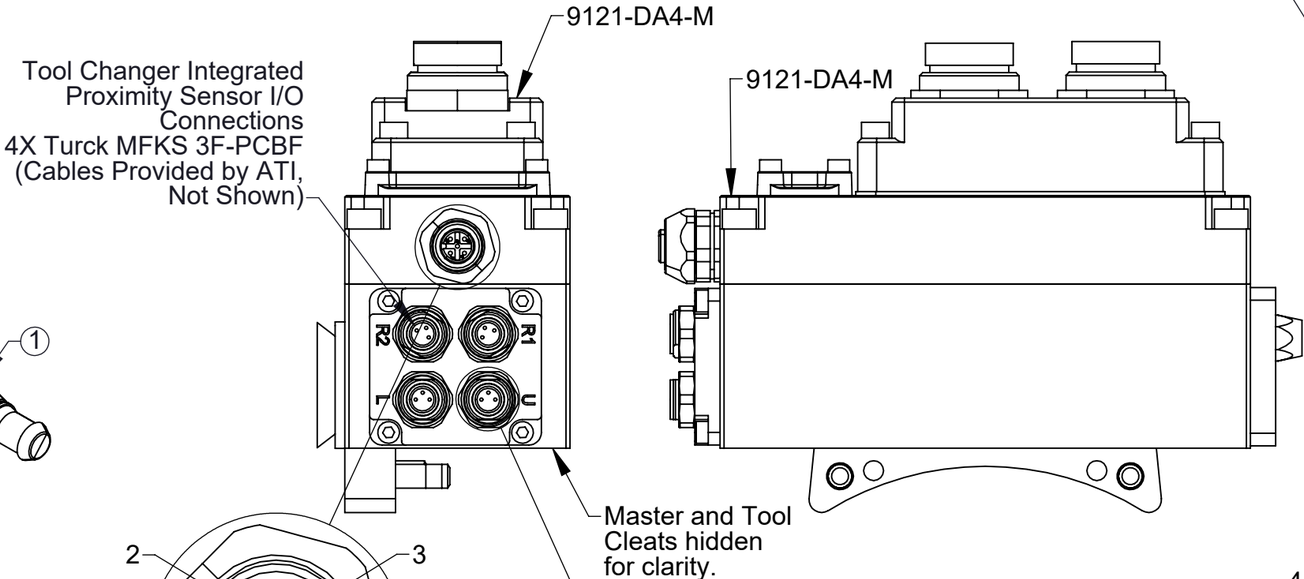
TITLE: DA4 DeviceNet Module Drawing

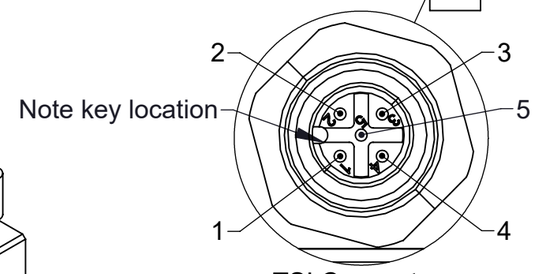
SCALE	SIZE	DRAWING NUMBER	REVISION
1:2	B	9630-20-DA4	07

DA4-M/DA4-T Serviceable Parts



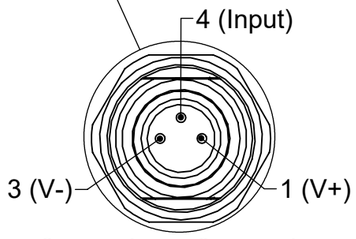
9121-DA4-M/T SERVICEABLE PARTS			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	9120-DE45-PLUG	Yellow Teach Plug w/ Lanyard and Caution Tags
2	1	3410-0001092-01	O-ring, Buna N 70D, AS568-023
3	1	3410-0001021-01	O-Ring AS568-031
4	8	3500-1058012-15	M3 X 12 SCHS, Corrosion Protection
5	1	3700-20-11881	Device Net Master Window, Thick
6	1	3700-20-11880	Tool ID Window
7	1	4010-0000030-01	V-Ring Seal V-22A Nitrile



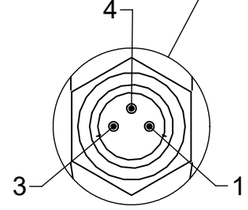


TSI Connector
Turck M12 5-Pin Female
FKD 4.5-0.5/18.25
Scale 2:1

TSI Connection	
1	TSI Out
2	N/C
3	N/C
4	TSI In
5	N/C



Sensor Input Connection
Typical
Turck MFKS 3F-PCBF
Scale 2:1



Turck MFKS 3
Scale 2:1

Valve Connection	
1	AUX1 V+ (Unlatch)
3	AUX1 V- (Common)
4	AUX1 V+ (Latch)

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3rd ANGLE PROJECTION

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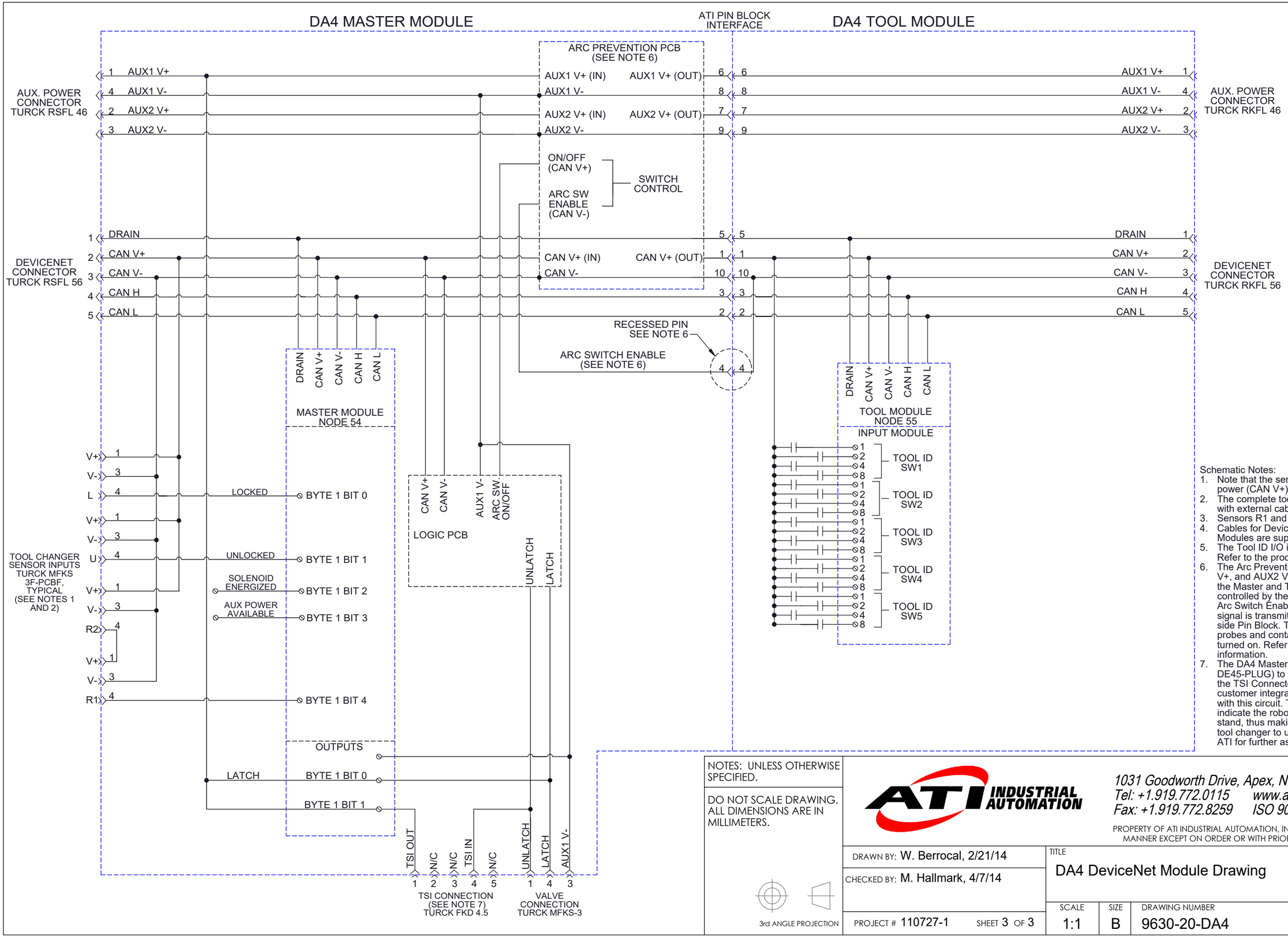
DRAWN BY: W. Berrocal, 2/21/14

CHECKED BY: M. Hallmark, 4/7/14

PROJECT # 110727-1 SHEET 2 OF 3

TITLE: DA4 DeviceNet Module Drawing

SCALE	SIZE	DRAWING NUMBER	REVISION
1:2	B	9630-20-DA4	07



Schematic Notes:

1. Note that the sensors are powered by DeviceNet power (CAN V+).
2. The complete tool changer package comes equipped with external cables that are connected to the sensors.
3. Sensors R1 and R2 are wired in series.
4. Cables for DeviceNet and Auxiliary Power to the DA4 Modules are supplied by the user.
5. The Tool ID I/O is reported in the DA4 Tool Bitmap. Refer to the product manual for more information.
6. The Arc Prevention Circuits turn off CAN V+, AUX1 V+, and AUX2 V+ during coupling and uncoupling of the Master and Tool. The switching function is controlled by the Latch/Unlatch commands and the Arc Switch Enable signal. The Arc Switch Enable signal is transmitted through a recessed pin in the Tool side Pin Block. This ensures that all of the spring probes and contact pins are touching when power is turned on. Refer to the product manual for additional information.
7. The DA4 Master is supplied with a Teach Plug (9120-DE45-PLUG) to make the TSI circuit (Pin 1 to Pin 4 on the TSI Connector). It is recommended that the customer integrate a mechanical limit switch to use with this circuit. The limit switch should be mounted to indicate the robot and the tool changer are in the stand, thus making the circuit and only allowing the tool changer to uncouple while in the stand. Contact ATI for further assistance.

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PROJECT # 110727-1 SHEET 3 OF 3

TITLE: DA4 DeviceNet Module Drawing

SCALE	SIZE	DRAWING NUMBER	REVISION
1:1	B	9630-20-DA4	07