

Standard HMI Configurations

Type 3R & ETO Configuration

Table 1
Display Interface PCB

Terminal	Pin	Description	Label	Rated Load
J1	1	HMI Display	For factory use	N/A
J2	1	RS485	Ground	N/A
	2		Data + (B)	
	3		Ground	
	4		Data - (A)	
J3	1	Input Power	Neutral	120 VAC 250mA
	2		Line	
	3		Not Connected	
J5	1	Run	Normally Closed	2A @ 250VAC
	2		Common	
	3		Normally Open	
J6	1	Power On	Normally Closed	2A @ 250VAC
	2		Common	
	3		Normally Open	
J7	1	Fault	Normally Closed	2A @ 250VAC
	2		Common	
	3		Normally Open	
J12	1	At Capacity	Normally Closed	2A @ 250VAC
	2		Common	
	3		Normally Open	
J19	1	ELC Power Supply	24 VDC	24 VDC
	2		Common	
	3		Not Connected	
J20	1	Gateway Power Supply	24 VDC	24 VDC
	2		Common	
	3		Not Connected	
J22	1	Start Command	24 VDC	Contact Closure
	2		Start	
	3		Not Connected	

Table 2
HMI Display

Terminal	Pin	Description		
Com 1	N/A	Communication Input from Display Interface PCB (DB-9)		
Com 2	N/A	Output to Customer's Network (DB-9)		
		Description	Label	Rated Load
Power Terminal	Pos	Input Power	Positive Sign	24 Volt DC
	Neg		Negative Sign	
	Com		Common Sign	

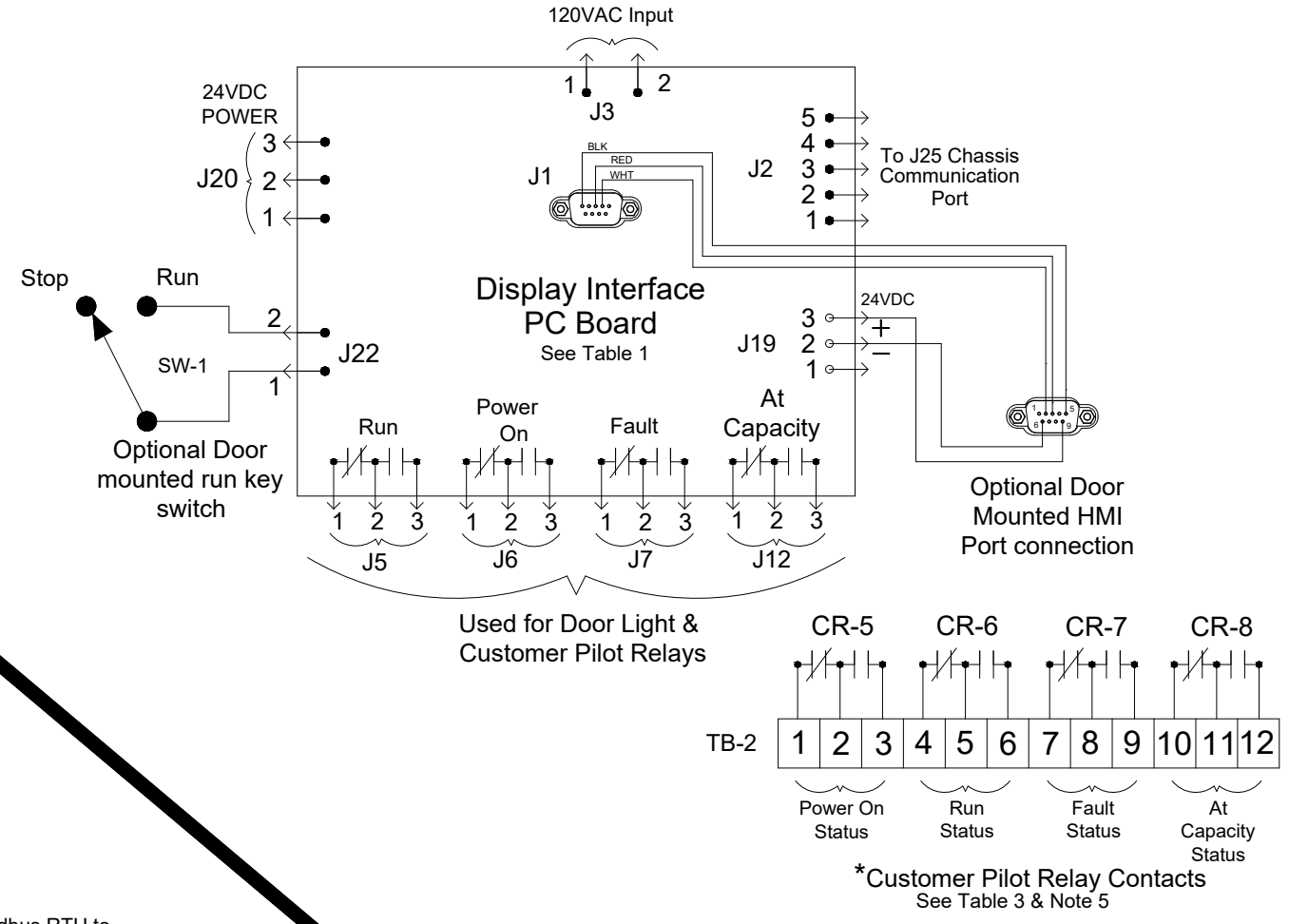
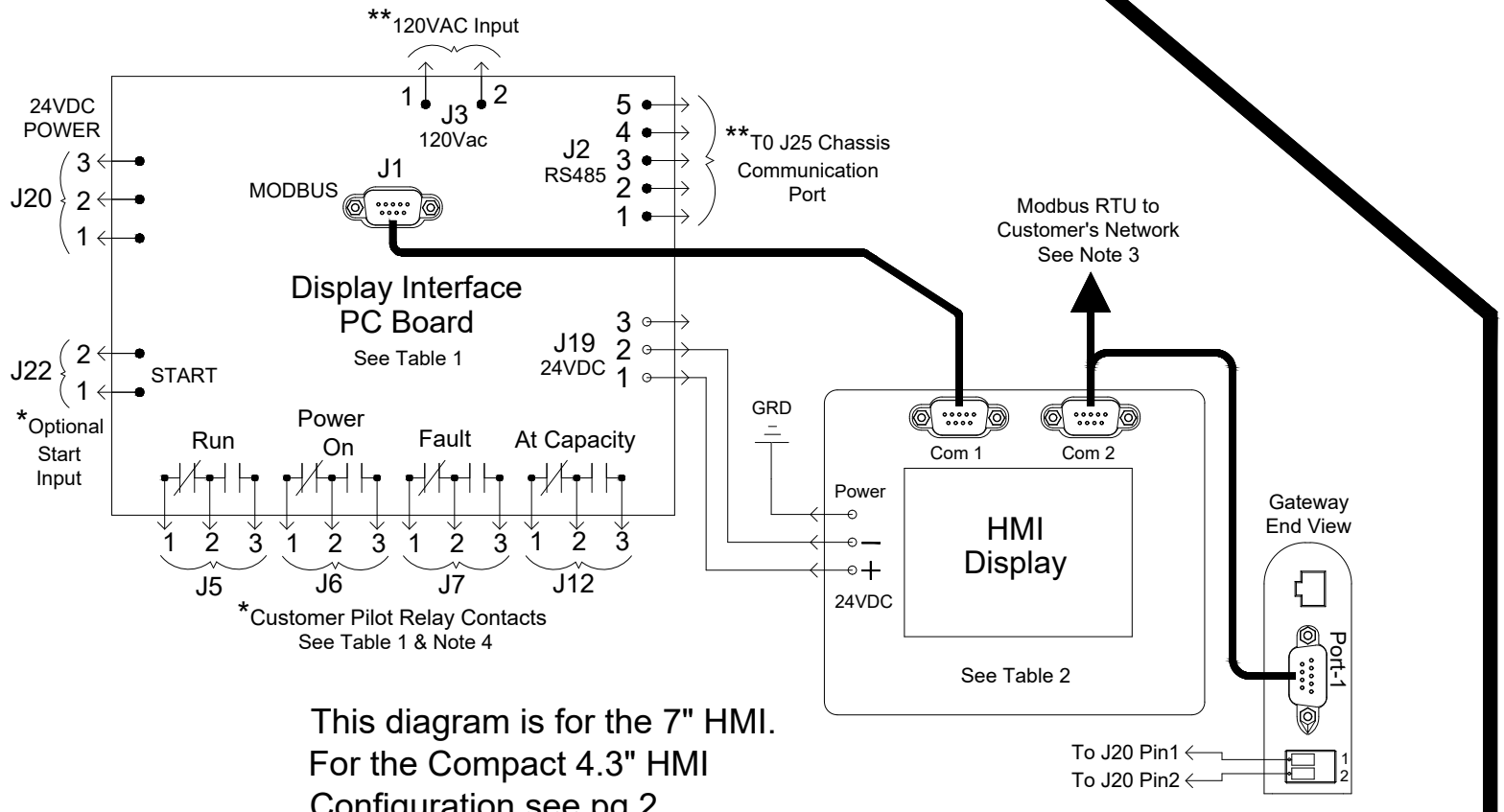
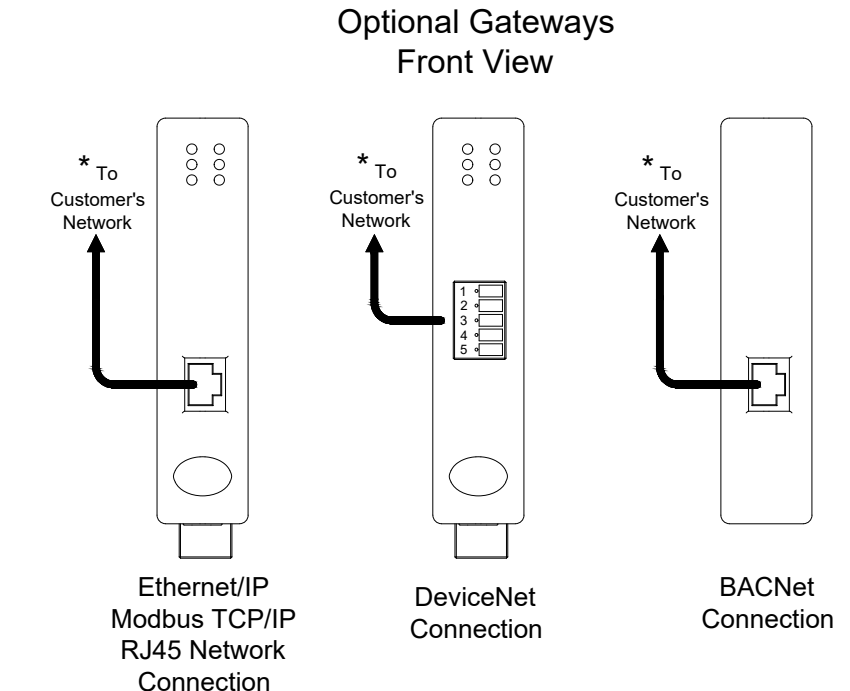


Table 3
Slave Relay Contacts

Terminal	Position	Description	Label	Rated Load
TB-2	1	Run	Normally Closed	General Use Rating 6A @ 250VAC
	2		Common	
	3		Normally Open	
	4	Power On	Normally Closed	
	5		Common	
	6		Normally Open	
	7	Fault	Normally Closed	
	8		Common	
	9		Normally Open	
	10	At Capacity	Normally Closed	
	11		Common	
	12		Normally Open	

*Customer Pilot Relay Contacts See Table 3 & Note 5

- Notes:**
- 1.) Typical customer connections noted with (*).
 - 2.) Customer connections if mounting a HMI panel noted with (**).
 - 3.) Available when Gateway isn't present.
 - 4.) Display interface PCB J5, J6, J7 & J12 wire range and tightening torque is 28-14 Awg at 4.4 in-lb (.5 Nm).
 - 5.) TB-2 wire range and tightening torque is 28-14 Awg at 4.4 in-lb (.5 Nm).
 - 6.) HMI display power terminal wire range and tightening torque is 30-12 Awg at 4.3 in-lb (.49 Nm).
 - 7.) 120V Power J3, wire range and tightening torque is 30-12 Awg at 7 in-lb (.8 Nm).

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NO	REVISION	DATE	BY	TOLERANCES (EXCEPT AS NOTED)
E	Added pg 2 Compact HMI	7/24/20	MJS	DECIMAL
D	J5,J6,J7,J12 rating 15A to 2A	11/27/17	MJS	.XX ± .05
C	Add BACNet Front view	7/26/17	MJS	.XXX± .025
B	Update Tables, add 3R Info	12/1/15	RHW	FRACTIONAL ± 1/16
A	Added DeviceNet Graphic	11/3/14	MJS	ANGULAR ± 1°

TCI® W132 N10611 Grant Drive
Germantown, WI 53022

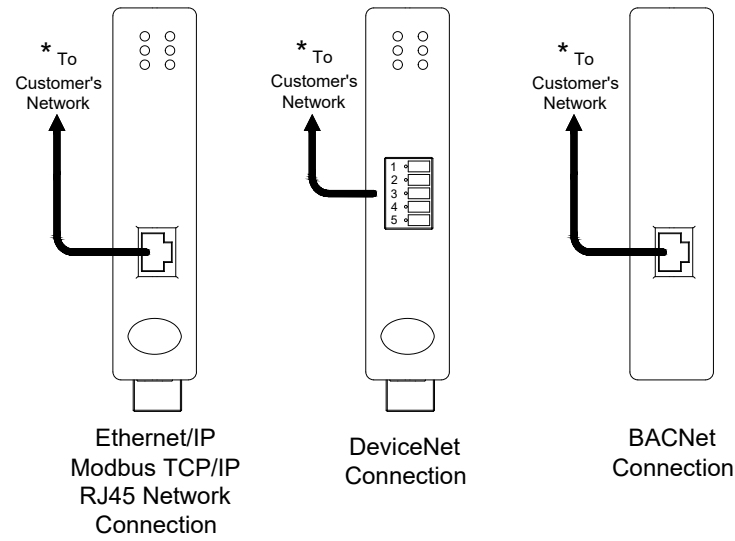
HMI, Network Communications Connection Diagram

DRN. BY: MJS DATE: 12/5/13 DWG. NO: 28283-1
SCALE: N/A SIZE: B SHT. 1 OF 2

Compact 4.3" HMI Configuration

Terminal	Pin	Description	Label	Rated Load
J1	1	HMI Display	For factory use	N/A
J2	1	RS485	Ground	N/A
	2		Data + (B)	
	3		Ground	
	4		Data - (A)	
J3	1	Input Power	Neutral	120 VAC 250mA
	2		Line	
	3		Not Connected	
J5	1	Run	Normally Closed	2A @ 250VAC
	2		Common	
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J6	1	Power On	Normally Closed	2A @ 250VAC
	2		Common	
	3		Normally Open	
J7	1	Fault	Normally Closed	2A @ 250VAC
	2		Common	
	3		Normally Open	
J12	1	At Capacity	Normally Closed	2A @ 250VAC
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	3		Normally Open	
J19	1	ELC Power Supply	24 VDC	24 VDC
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J20	1	Gateway Power Supply	24 VDC	24 VDC
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	3		Not Connected	
J22	1	Start Command	24 VDC	Contact Closure
	2		Start	
	3		Not Connected	

Optional Gateways Front View

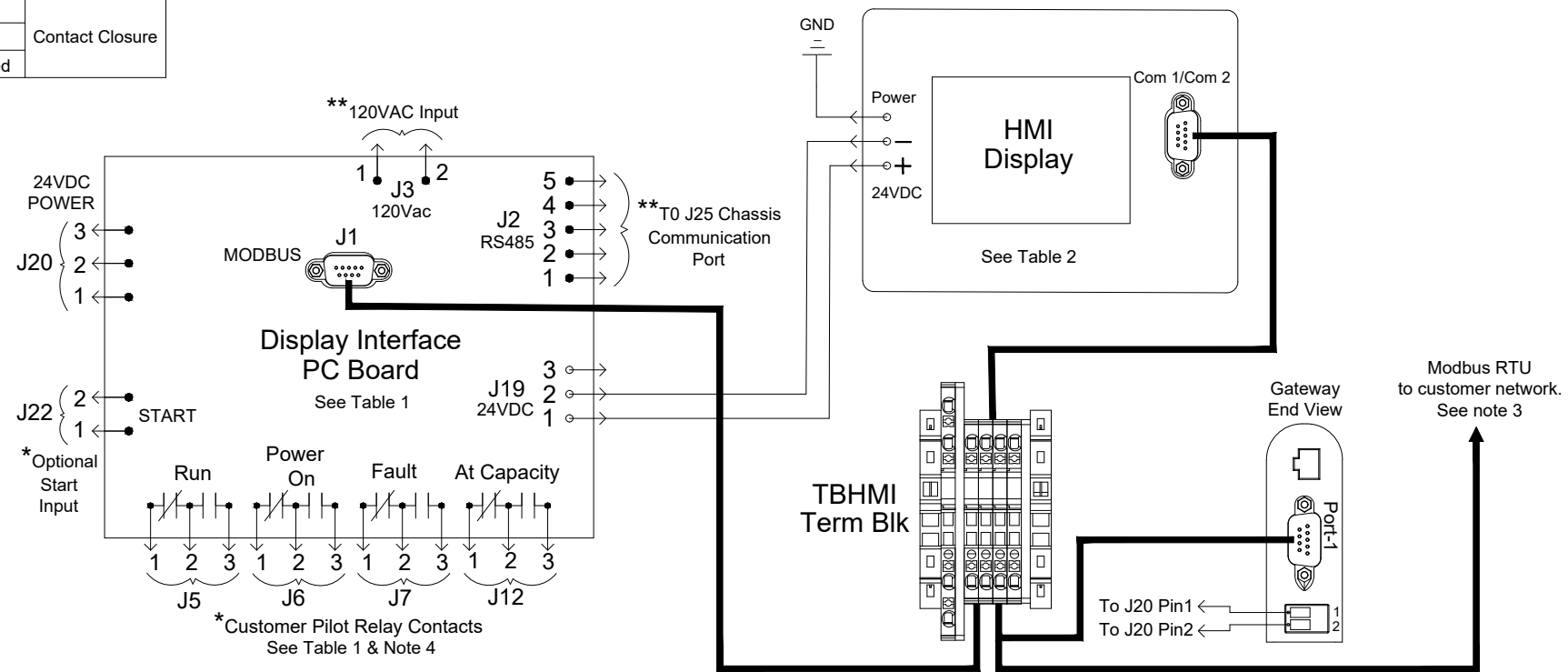


For Type 3R and ETO slave relay connections see pg 1

Terminal	Pin	Description	Label	Rated Load
TBHMI	1	Connection to Display Interface Board	RX	RS232
	2		TX	
	3	Connection to Customer Network or Gateway	D+	RS485
	4		D-	
	5	Com./GND	Com. GND	N/A

This diagram is for the Compact 4.3" HMI.
For the 7" HMI Configuration see pg 1

Terminal	Pin	Description
Com 1 / Com 2	N/A	Connection to Terminal Block TBHMI
Power Terminal	Pos	Positive Sign
	Neg	Negative Sign
	Com	Common Sign
		24 Volt DC



Notes:

- 1.) Typical customer connections noted with (*).
- 2.) Customer connections if mounting a HMI panel noted with (**).
- 3.) Available when Gateway isn't present.
- 4.) Display interface PCB J5, J6, J7 & J12 wire range and tightening torque is 28-14 Awg at 4.4 in-lb (.5 Nm).
- 5.) TBHMI wire range is 26-14 Awg (spring clamp / push in type).
- 6.) HMI display power terminal wire range and tightening torque is 30-12 Awg at 4.3 in-lb (.49 Nm).
- 7.) 120V Power J3, wire range and tightening torque is 30-12 Awg at 7 in-lb (.8 Nm).

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TOLERANCES (EXCEPT AS NOTED)			
			DECIMAL
			.XX ± .05
			.XXX ± .025
			FRACTIONAL
			± 1/16
			ANGULAR
			± 1°
NO	REVISION	DATE	BY
			see page 1 for Revision

TCI® W132 N10611 Grant Drive
Germantown, WI 53022

HMI, Network Communications Connection Diagram

DRN. BY	MJS	DATE	12/5/13	DWG. NO.	28283-1
SCALE	N/A	SIZE	B		