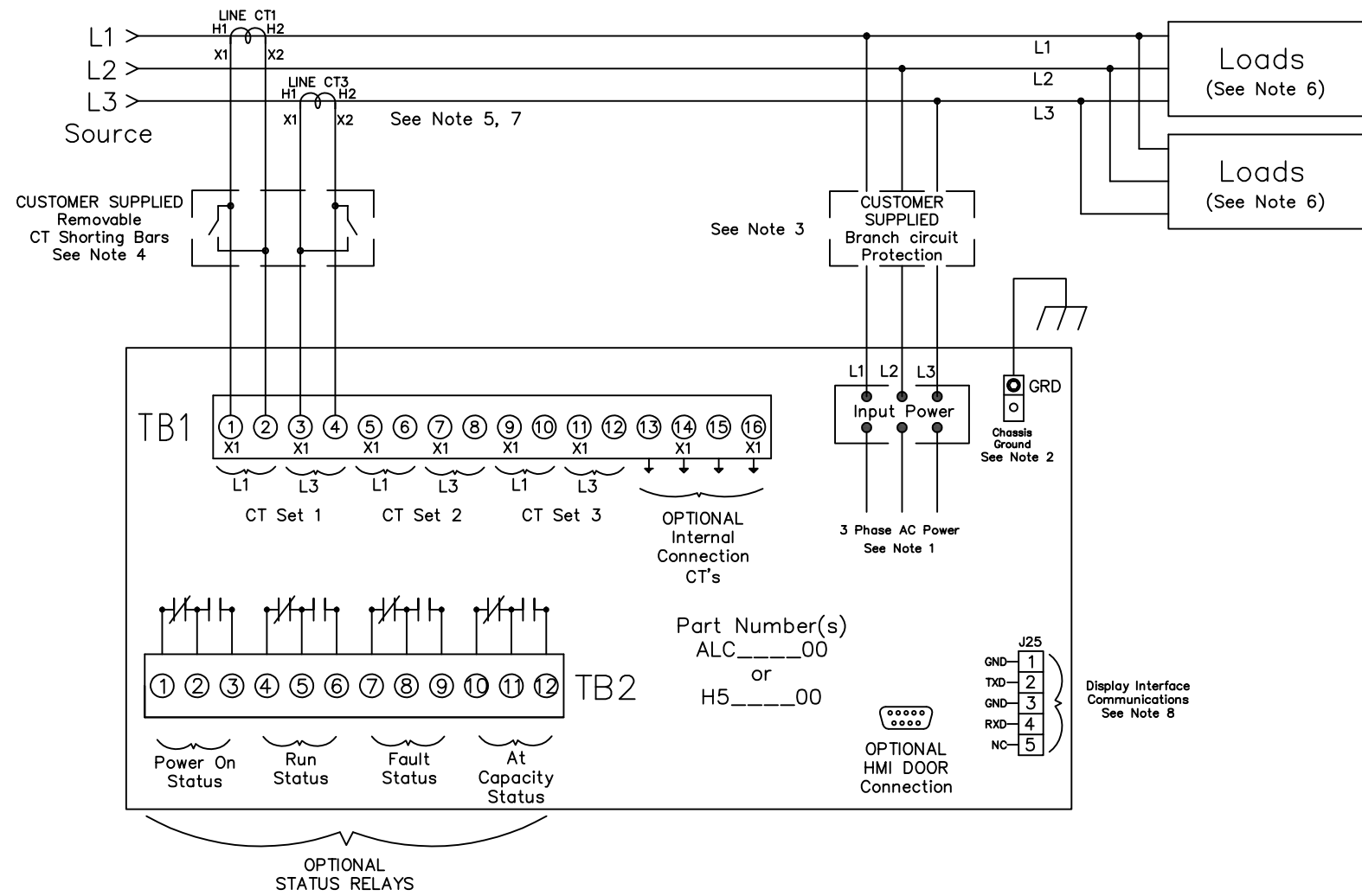


MOST COMMON APPLICATION SINGLE UNIT STANDARD LINE SIDE CT PLACEMENT & WIRING

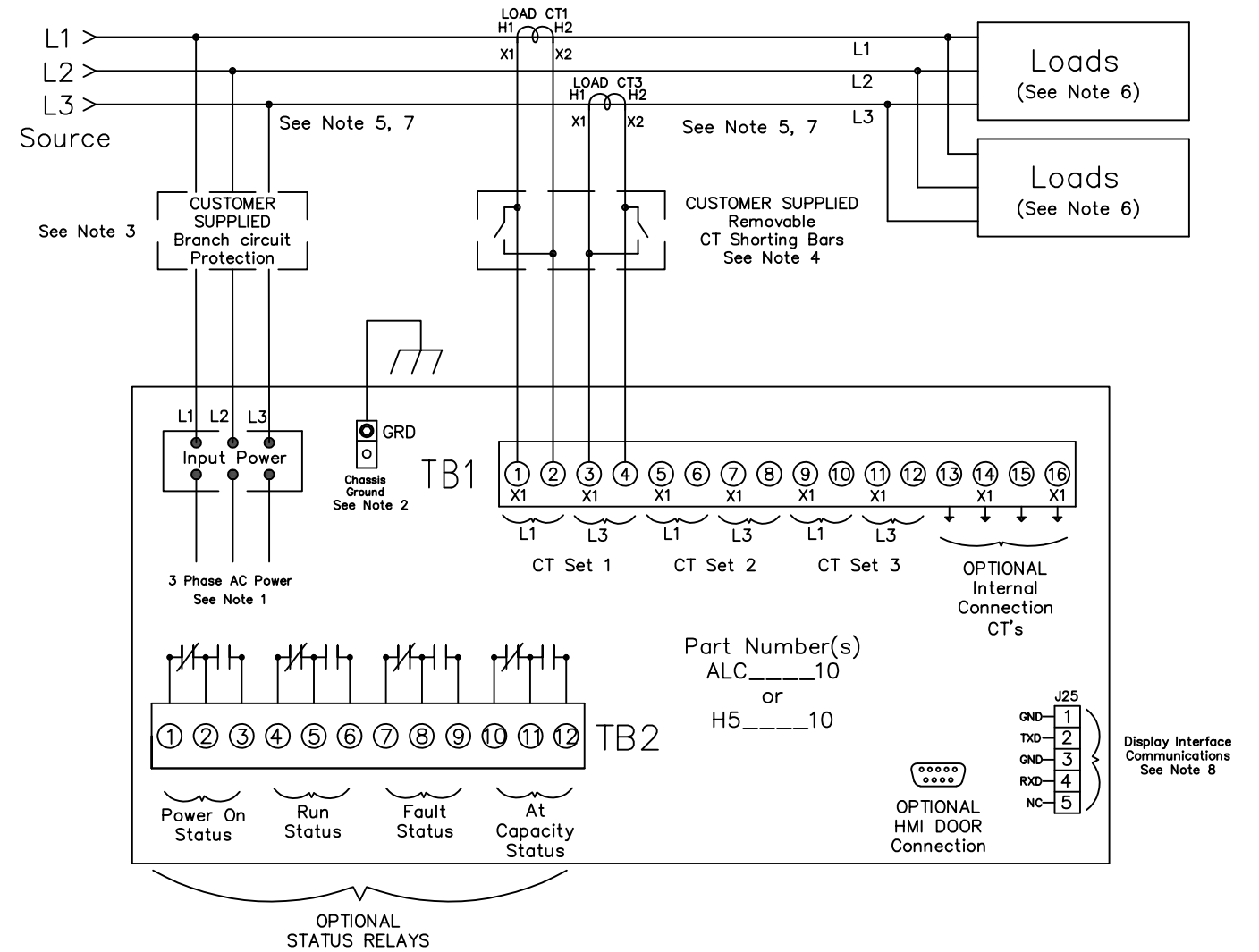


Filter Size	Ground Wire Size	Terminal Wire Size & Tightening Torque	Wire Type
45 to 100A	6 - 2/0 Awg	50 (5.7)	CU/AL
150A	6 - 2/0 Awg	50 (5.7)	CU/AL
200A**	4 - 2/0 Awg	50 (5.7)	CU/AL
250A/200A*	6 Awg - 250MCM	375 (42.4)	CU
300A**	3 Awg - 500 MCM	375 (42.4)	CU/AL
300A*/350A (2)	4 Awg - 600 MCM	500 (57)	CU/AL
400A/500A (2)	4 Awg - 600 MCM	500 (57)	CU
600A/700A (3)	2 Awg - 600 MCM	500 (57)	CU/AL

* Narrow unit
** Legacy Double Converter Unit

Filter Size	MFG	Breaker IC	Wire Size	Torque In-Lbs (Nm)	Wire Type
45A to 50A	Fuse Block	None	12 Awg - 1/0 Awg	50 (5.7)	CU/AL
45A to 100A	Eaton	65 & 100 kA	6 Awg - 3/0 Awg	50 (5.7)	CU/AL
45A to 100A	ABB	65 & 100 kA	14 Awg - 1/0 Awg	50 (5.7)	CU/AL
45A to 100A	Rockwell	65 & 100 kA	14 Awg - 1/0 Awg	62 (7)	CU Only
45A to 100A	Terminal Block	None	14 Awg - 2/0 Awg	120 (13.6)	CU/AL
90A to 150A	Disconnect	None	4 Awg - 300 MCM	200 (23)	CU/AL
90A to 150A	Fuse Block	None	6 Awg - 250 MCM	375 (42)	CU/AL
150A/200A	Eaton	65 & 100 kA	8 Awg - 350 MCM	177 (20)	CU/AL
150A/200A	ABB	65 & 100 kA	4 Awg - 300 MCM	200 (23)	CU/AL
150A/200A	Rockwell	65 & 100 kA	4 Awg - 300 MCM	200 (23)	CU/AL
150A/200A	Terminal Block	None	3/0 Awg - 350 MCM	275 (31)	CU/AL
200A/250A	Fuse Block	None	4 Awg - 500 MCM	500 (57)	CU/AL

ALTERNATE CONFIGURATION SINGLE UNIT LOAD SIDE CT PLACEMENT & WIRING



Filter Size	MFG	Breaker IC	Wire Size	Torque In-Lbs (Nm)	Wire Type
250A/300A	Eaton	65 & 100 kA	250 MCM - 500 MCM	375 (42)	CU/AL
250A/350A	ABB	65 & 100 kA	(2) 3/0 Awg - 250 MCM	275 (31)	CU/AL
250A/350A	Rockwell	65 & 100 kA	(2) 2/0 Awg - 250 MCM	275 (31)	CU/AL
250A/300A	Terminal Block	None	4 Awg - 500 MCM	375 (42)	CU/AL
300A/350A	Disconnect	None	(2) 6 Awg - 350 MCM	500 (57)	CU/AL
300A*/350A	Terminal Block	None	(2) 6 Awg - 250 MCM	275 (31)	CU/AL
300A*/350A	LSIS	65 & 100 kA	(2) 1/0 Awg - 750 MCM	375 (42)	CU/AL
350A to 500A	Eaton	65 & 100 kA	(2) 2 Awg - 500 MCM	375 (42)	CU/AL
400A/500A	Terminal Block	None	(2) 4 Awg - 500 MCM	450 (51)	CU/AL
400A/500A	Disconnect	None	(2) 2 Awg - 600 MCM	500 (57)	CU/AL
300A to 500A	Fuse Block	None	(2) 4 Awg - 500 MCM	450 (51)	CU/AL
600A/700A	LSIS	65 & 100 kA	(3) 3/0 Awg - 400 MCM	400 (45)	CU/AL
600A/700A	Terminal Block	None	(4) 6 Awg - 350 MCM	275 (31)	CU/AL
All	Control Terminal	All	28 Awg - 14 Awg	4.4 (0.5)	N/A

* Narrow unit

Notes:

- 1.) Wiring should be 75°C or higher insulated copper, with the appropriate voltage and current rating.
- 2.) Chassis ground must be connected to the ground of the premises wiring system, in accordance with NEC and local codes. Connection must be made using a wire conductor.
- 3.) Customer is responsible for branch circuit protection.
- 4.) Operating current transformers with the secondary winding open can result in a high voltage across the secondary terminals which may be dangerous to personnel or equipment.
- 5.) Current transformers should be centered around conductor.
- 6.) Load(s) have an integral 3% line reactance or equivalent dc bus choke to optimize Active Filter utilization, consult TCI for Active Filter capacity with less than 3%.
- 7.) CT's are customer installed, and external to the Active Filter.
- 8.) Available network interface depends on CM Module HMI option or enclosure type. Reference the HGA IOM or HMI Schematic / Connection Diagram 28283-1

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REV	DESCRIPTION	DATE	BY	TOLERANCES (EXCEPT AS NOTED)
R	5762 CT consistency	11/2/21	MJS	DECIMAL
Q	Update tables & add 350/700	8/6/20	MJS	.XX ±.03
P	update to 12 pos TB1	4/7/20	MJS	.XXX±.010
N	Remove ** from tables	12/20/16	MJS	FRACTIONAL
M	3744 Add 400A to table	9/23/16	MJS	± 1/32
L	250A/500A torque update	6/8/16	MJS	ANGULAR
NO	REVISION	DATE	BY	± 1°



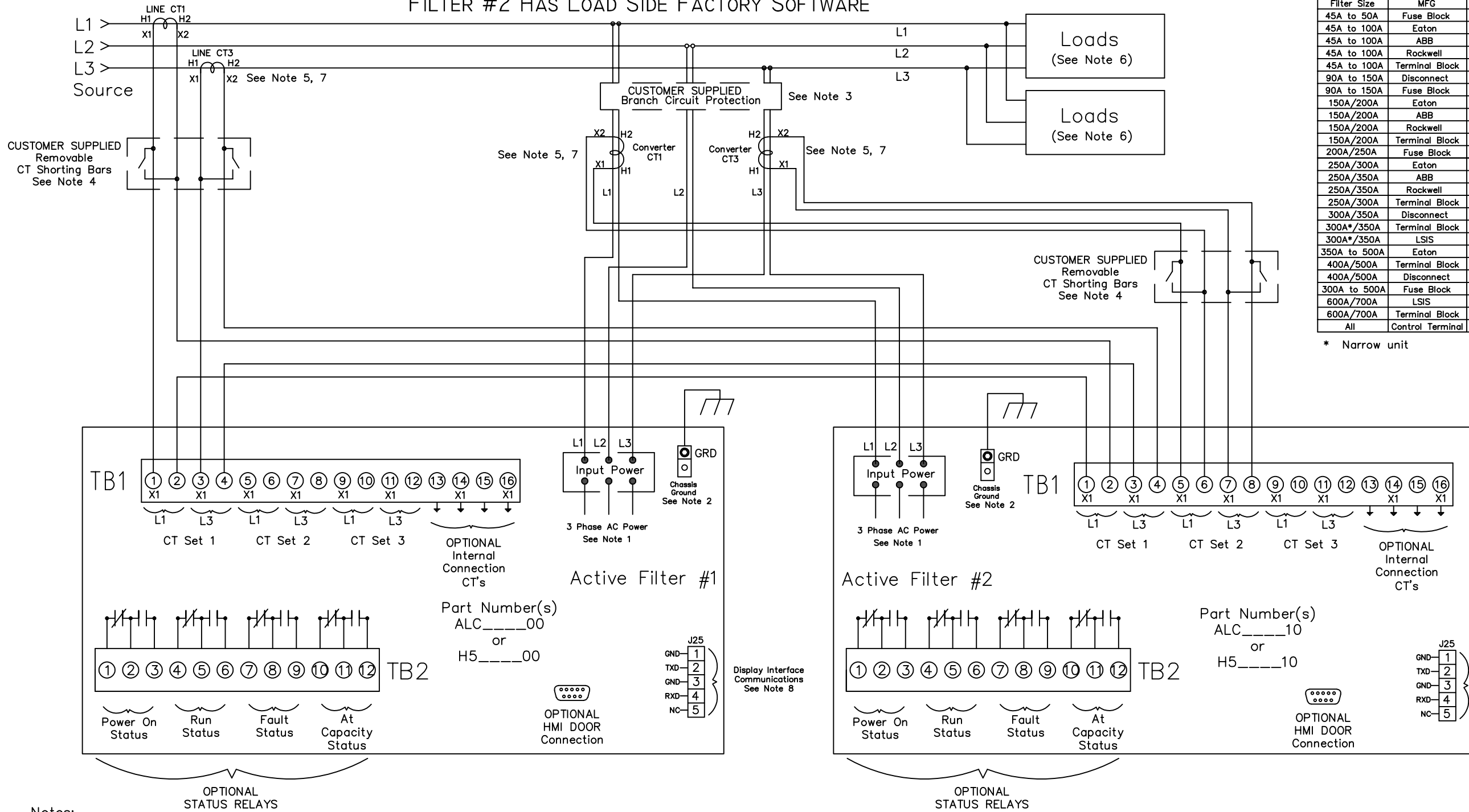
TCI[®] W132 N10611 Grant Drive
Germantown, WI 53022
©TCI, 2021

An Allied Motion Company

CCD, Active Filter, 50-700A

DRN. BY	MJS	DATE	11/3/21	DWG. NO.	25027-3
SCALE	n/a	SIZE	B	SHT.1 OF 2	

**TWO FILTERS IN PARALLEL:
 FILTER #1 HAS STANDARD LINE SIDE CT PLACEMENT & WIRING
 FILTER #2 HAS LOAD SIDE FACTORY SOFTWARE**



Terminal Wire Size & Tightening Torque					
Filter Size	MFG	Breaker IC	Wire Size	Torque In-Lbs (Nm)	Wire Type
45A to 50A	Fuse Block	None	12 Awg - 1/0 Awg	50 (5.7)	CU/AL
45A to 100A	Eaton	65 & 100 kA	6 Awg - 3/0 Awg	50 (5.7)	CU/AL
45A to 100A	ABB	65 & 100 kA	14 Awg - 1/0 Awg	50 (5.7)	CU/AL
45A to 100A	Rockwell	65 & 100 kA	14 Awg - 1/0 Awg	62 (7)	CU Only
45A to 100A	Terminal Block	None	14 Awg - 2/0 Awg	120 (13.6)	CU/AL
90A to 150A	Disconnect	None	4 Awg - 300 MCM	200 (23)	CU/AL
90A to 150A	Fuse Block	None	6 Awg - 250 MCM	375 (42)	CU/AL
150A/200A	Eaton	65 & 100 kA	8 Awg - 350 MCM	177 (20)	CU/AL
150A/200A	ABB	65 & 100 kA	4 Awg - 300 MCM	200 (23)	CU/AL
150A/200A	Rockwell	65 & 100 kA	4 Awg - 300 MCM	200 (23)	CU/AL
150A/200A	Terminal Block	None	3/0 Awg - 350 MCM	275 (31)	CU/AL
200A/250A	Fuse Block	None	4 Awg - 500 MCM	500 (57)	CU/AL
250A/300A	Eaton	65 & 100 kA	250 MCM - 500 MCM	375 (42)	CU/AL
250A/350A	ABB	65 & 100 kA	(2) 3/0 Awg - 250 MCM	275 (31)	CU/AL
250A/350A	Rockwell	65 & 100 kA	(2) 2/0 Awg - 250 MCM	275 (31)	CU/AL
250A/300A	Terminal Block	None	4 Awg - 500 MCM	375 (42)	CU/AL
300A/350A	Disconnect	None	(2) 6 Awg - 350 MCM	500 (57)	CU/AL
300A*/350A	Terminal Block	None	(2) 6 Awg - 250 MCM	275 (31)	CU/AL
300A*/350A	LSIS	65 & 100 kA	(2) 1/0 Awg - 750 MCM	375 (42)	CU/AL
350A to 500A	Eaton	65 & 100 kA	(2) 2 Awg - 500 MCM	375 (42)	CU/AL
400A/500A	Terminal Block	None	(2) 4 Awg - 500 MCM	450 (51)	CU/AL
400A/500A	Disconnect	None	(2) 2 Awg - 600 MCM	500 (57)	CU/AL
300A to 500A	Fuse Block	None	(2) 4 Awg - 500 MCM	450 (51)	CU/AL
600A/700A	LSIS	65 & 100 kA	(3) 3/0 Awg - 400 MCM	400 (45)	CU/AL
600A/700A	Terminal Block	None	(4) 6 Awg - 350 MCM	275 (31)	CU/AL
All	Control Terminal	All	28 Awg - 14 Awg	4.4 (0.5)	N/A

* Narrow unit

Ground Terminal Wire Size & Tightening Torque			
Filter Size	Wire Size	Torque In-Lbs (Nm)	Wire Type
45 to 100A	6 - 2/0 Awg	50 (5.7)	CU/AL
150A	6 - 2/0 Awg	50 (5.7)	CU/AL
200A**	4 - 2/0 Awg	50 (5.7)	CU/AL
250A/200A*	6 Awg - 250MCM	375 (42.4)	CU
300A**	3 Awg - 500 MCM	375 (42.4)	CU/AL
300A*/350A	(2) 4 Awg - 600 MCM	500 (57)	CU/AL
400A/500A	(2) 4 Awg - 600 MCM	500 (57)	CU/AL
600A/700A	(3) 2 Awg - 600 MCM	500 (57)	CU/AL

* Narrow unit
 ** Legacy Double Converter Unit

- Notes:
- 1.) Wiring should be 75°C or higher insulated copper, with the appropriate voltage and current rating.
 - 2.) Chassis ground must be connected to the ground of the premises wiring system, in accordance with NEC and local codes. Connection must be made using a wire conductor.
 - 3.) Customer is responsible for branch circuit protection.
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 - 8.) Available network interface depends on CM Module HMI option or enclosure type. Reference the HGA IOM or HMI Schematic / Connection Diagram 28283-1

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				DECIMAL	
				.XX ± 0.03	
				.XXX ± 0.10	
				FRACTIONAL	
			± 1/32		
			ANGULAR		
			± 1°		
	See Sheet 1 For Rev's				DRN. BY MJS
					DATE 11/23/21
					DWG. NO. 25027-3
					SCALE n/a
					SIZE B
					SHT. 2 OF 2