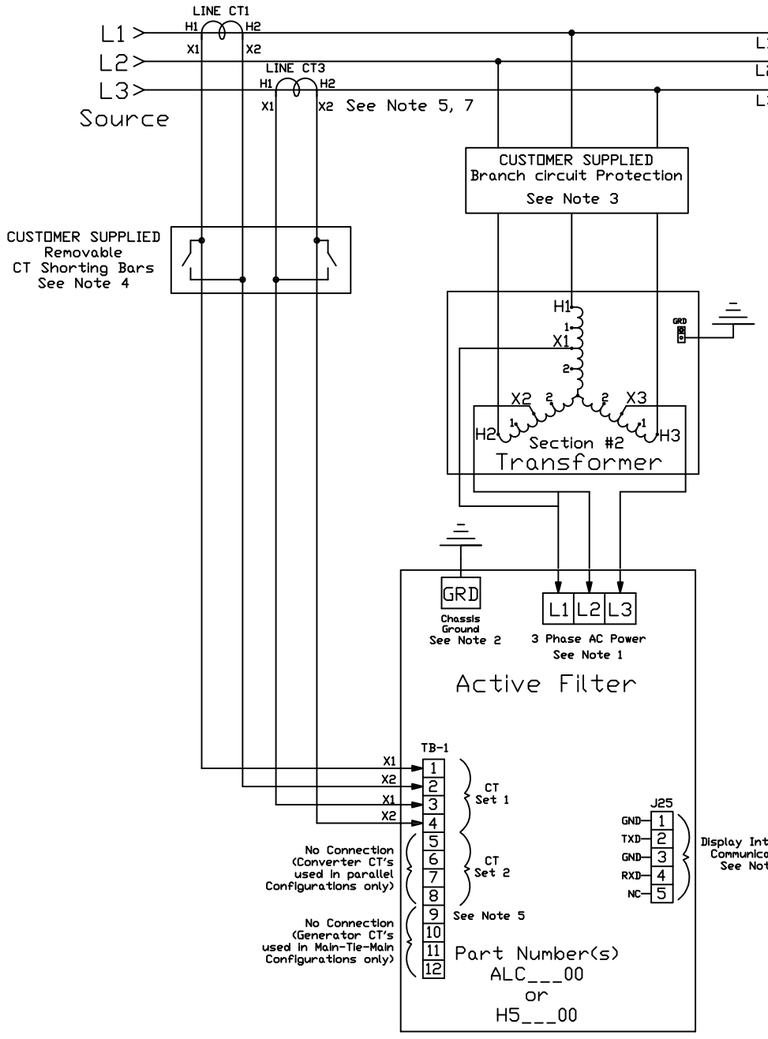
Most Common Application
Single Unit Standard Line Side CT Placement & Wiring

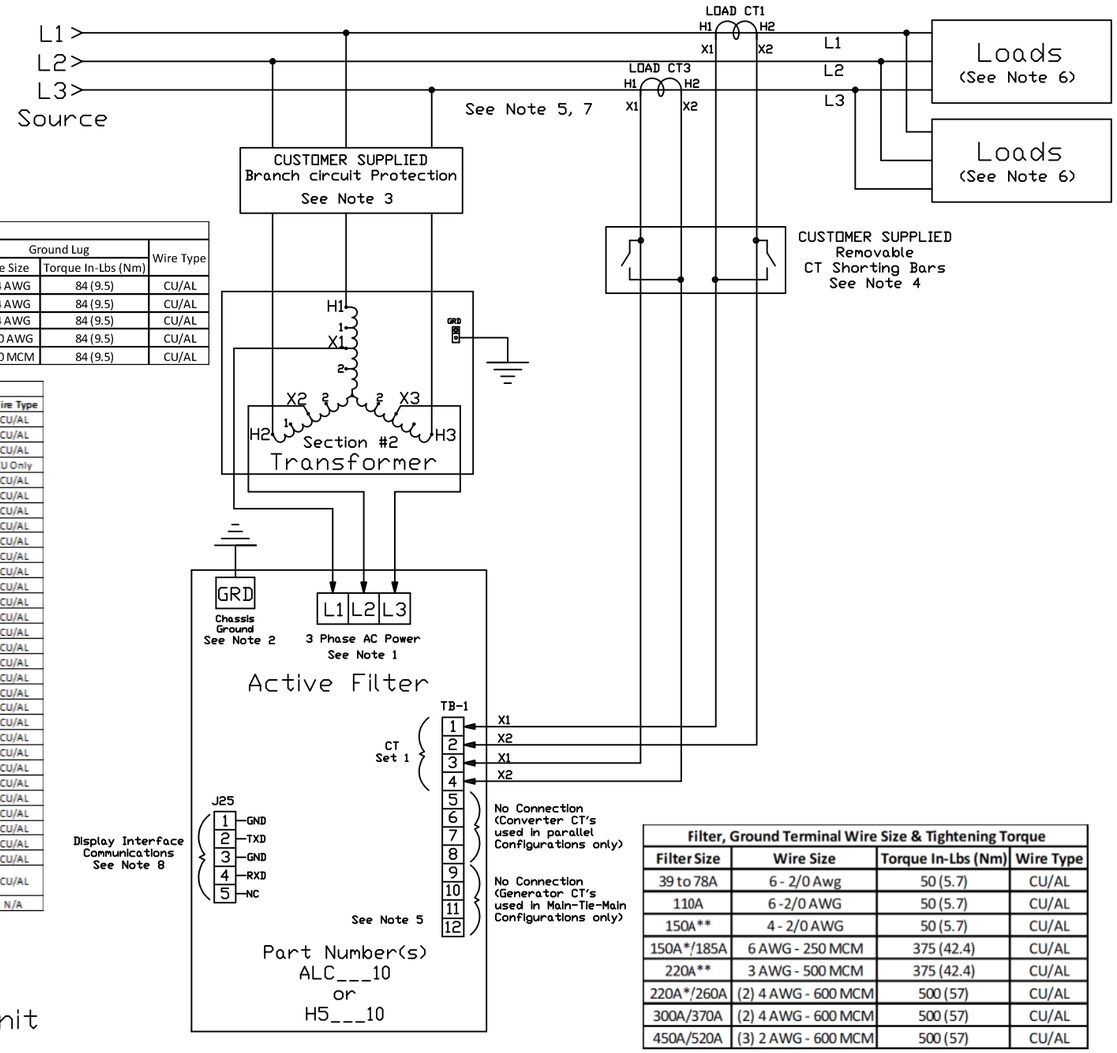


Transformer Terminals							
Size	Primary Power Terminals		Secondary Power Terminals		Ground Lug		Wire Type
	Wire Size	Torque In-Lbs (Nm)	Wire Size	Torque In-Lbs (Nm)	Wire Size	Torque In-Lbs (Nm)	
39 to 78 Amp	2/0-14 AWG	84 (9.5)	2-14 AWG	84 (9.5)	2-14 AWG	84 (9.5)	CU/AL
110/150 Amp	300MCM -6 AWG	240 (27)	300MCM -6 AWG	240 (27)	2-14 AWG	84 (9.5)	CU/AL
185/220 Amp	600MCM-6AWG	360 (41)	600MCM-6AWG	360 (41)	2-14 AWG	84 (9.5)	CU/AL
300 to 370 Amp	PADS	360 (41)	PADS	360 (41)	6-2/0 AWG	84 (9.5)	CU/AL
450 to 520 Amp	PADS	360 (41	PADS	360 (41)	6-300 MCM	84 (9.5)	CU/AL

Filter, Terminal Wire Size & Tightening Torque					
Filter Size	MFG	Breaker IC	Wire Size	Torque In-Lbs (Nm)	Wire Type
39A	Fuse Block	None	12 - 1/0 AWG	50 (5.6)	CU/AL
39A-78A	Eaton PD	65kA & 100kA	14 - 3/0 AWG	45 (5.1)	CU/AL
39A-78A	ABB	65kA & 100kA	14 AWG - 1/0	50.44 (5.7)	CU/AL
39A-78A	Rockwell	65kA & 100kA	14 - 1/0 AWG	62 (7)	CU Only
39A-78A	LSIS	65kA & 100kA	14 AWG - 3/0	135 (15)	CU/AL
39A-78A	Terminal Block	None	14 - 2/0 AWG	120 (13.6)	CU/AL
78A-110A	Fuse Block	None	6 AWG - 250 MCM	375 (42)	CU/AL
78A-110A	Fuse Disconnect	None	4 AWG - 300 MCM	200 (23)	CU/AL
110A	Eaton PD	65kA & 100kA	4 - 4/0 AWG	177 (20)	CU/AL
110A	LSIS	65kA	1/0 - 350 MCM	285 (32)	CU/AL
110A	LSIS	100kA	1/0 - 300 MCM	285 (32)	CU/AL
110A-150A	ABB	65kA & 100kA	4 AWG - 300 MCM	200 (22.6)	CU/AL
110A-150A	Rockwell	65kA & 100kA	4 AWG - 300 MCM	200 (23)	CU/AL
110A-150A	Terminal Block	None	3/0 - 350 MCM	275 (31)	CU/AL
150A	LSIS	65kA	1/0 - 350 MCM	390 (44)	CU/AL
150A	LSIS	100kA	1/0 - 300 MCM	390 (44)	CU/AL
150A-185A	Eaton PD	65kA & 100kA	250–350 MCM	375 (42)	CU/AL
150A-185A	Fuse Block	None	4 AWG - 500 MCM	450 (51)	CU/AL
185A	Terminal Block	None	4 - 500 MCM	375 (42.4)	CU/AL
185A-260A	ABB	65kA & 100kA	(2) 2/0 - 500 MCM	275 (31)	CU/AL
185A-260A	Rockwell	65kA & 100kA	(2) 2/0 - 250 MCM	275 (31)	CU/AL
185A-260A	LSIS	65kA & 100kA	1/0 - 750 MCM	475 (54)	CU/AL
220A	Eaton PD	65kA & 100kA	(2) 3/0-250 MCM	375 (42)	CU/AL
220A-260A	Terminal Block	None	4/0 conv, (2) 6 AWG - 250 grid	375 (42.4), 275 (31.1)	CU/AL
220A-370A	Fuse Block	None	(2) 4 AWG - 500 MCM	450 (51)	CU/AL
220A-370A	Fuse Disconnect	None	(2) 2 AWG - 600 MCM	500 (57)	CU/AL
260A-370A	Eaton PD	65kA & 100kA	(2) 2-500 MCM	375 (42)	CU/AL
300A-370A	LSIS	65kA & 100kA	(2) 2/0 - 500 MCM	360 (40.5)	CU/AL
300A-370A	Terminal Block	None	(2) 4 AWG - 500 kcmil	450 (51)	CU/AL
450A-520A	LSIS	65kA & 100kA	(3) 3/0 - 400 MCM	400 (45)	CU/AL
450A-520A	Terminal Block	None	(2) 600kcmil-2Awg, (4) 6 AWG - 350MCM	500 (56.5), 275 (31.1)	CU/AL
All	Control Terminal	All	28 to 14 AWG	4.4 (0.5)	N/A

* Narrow unit
** Legacy Double Converter Unit

Alternate Configuration
Single Unit Load Side CT Placement & Wiring



Filter, Ground Terminal Wire Size & Tightening Torque			
Filter Size	Wire Size	Torque In-Lbs (Nm)	Wire Type
39 to 78A	6 - 2/0 Awg	50 (5.7)	CU/AL
110A	6 -2/0 AWG	50 (5.7)	CU/AL
150A**	4 - 2/0 AWG	50 (5.7)	CU/AL
150A*/185A	6 AWG - 250 MCM	375 (42.4)	CU/AL
220A**	3 AWG - 500 MCM	375 (42.4)	CU/AL
220A*/260A	(2) 4 AWG - 600 MCM	500 (57)	CU/AL
300A/370A	(2) 4 AWG - 600 MCM	500 (57)	CU/AL
450A/520A	(3) 2 AWG - 600 MCM	500 (57)	CU/AL

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. Reference the HGA IOM and HMI Installation Drawing 28283-1

NO	REVISION	DATE	BY
H	Added 450/520A details	3/24/21	MJS
G	update 12 pos TB1	4/7/20	MJS
F	ADDED 110A TO TABLE	12/20/16	MJS
E	3744 ADDED TO TABLES	9/23/16	MJS
D	CHANGE ADD NOTES	1/18/16	RHW
C	IOM UPDATES MERGE CCD'S	9/3/15	MJS

TOLERANCES (EXCEPT AS NOTED)
DECIMAL .XX ±.03 .XXX±.010
FRACTIONAL ± 1/32
ANGULAR ± 1°

TCI® An Allied Motion Company
W132 N10611 Grant Drive
Germantown, WI 53022

600 Volt Active Filter Conn. Diagram

DRN. BY RHW | DATE 4/30/13 | DWG. NO. 28425
SCALE N/A | SIZE B | SHT. 1 OF 2

Filter, Terminal Wire Size & Tightening Torque					
Filter Size	MFG	Breaker IC	Wire Size	Torque In-Lbs (Nm)	Wire Type
39A	Fuse Block	None	12 - 1/0 AWG	50 (5.6)	CU/AL
39A-78A	Eaton PD	65kA & 100kA	14 - 3/0 AWG	45 (5.1)	CU/AL
39A-78A	ABB	65kA & 100kA	14 AWG - 1/0	50.44 (5.7)	CU/AL
39A-78A	Rockwell	65kA & 100kA	14 - 1/0 AWG	62 (7)	CU Only
39A-78A	LSIS	65kA & 100kA	14 AWG - 3/0	135 (15)	CU/AL
39A-78A	Terminal Block	None	14 - 2/0 AWG	120 (13.6)	CU/AL
78A-110A	Fuse Block	None	6 AWG - 250 MCM	375 (42)	CU/AL
78A-110A	Fuse Disconnect	None	4 AWG - 300 MCM	200 (23)	CU/AL
110A	Eaton PD	65kA & 100kA	4 - 4/0 AWG	177 (20)	CU/AL
110A	LSIS	65kA	1/0 - 350 MCM	285 (32)	CU/AL
110A	LSIS	100kA	1/0 - 300 MCM	285 (32)	CU/AL
110A-150A	ABB	65kA & 100kA	4 AWG - 300 MCM	200 (22.6)	CU/AL
110A-150A	Rockwell	65kA & 100kA	4 AWG - 300 MCM	200 (23)	CU/AL
110A-150A	Terminal Block	None	3/0 - 350 MCM	275 (31)	CU/AL
150A	LSIS	65kA	1/0 - 350 MCM	390 (44)	CU/AL
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150A-185A	Eaton PD	65kA & 100kA	250–350 MCM	375 (42)	CU/AL
150A-185A	Fuse Block	None	4 AWG - 500 MCM	450 (51)	CU/AL
185A	Terminal Block	None	4 - 500 MCM	375 (42.4)	CU/AL
185A-260A	ABB	65kA & 100kA	(2) 2/0 - 500 MCM	275 (31)	CU/AL
185A-260A	Rockwell	65kA & 100kA	(2) 2/0 - 250 MCM	275 (31)	CU/AL
185A-260A	LSIS	65kA & 100kA	1/0 - 750 MCM	475 (54)	CU/AL
220A	Eaton PD	65kA & 100kA	(2) 3/0-250 MCM	375 (42)	CU/AL
220A-260A	Terminal Block	None	4/0 conv, (2) 6 AWG - 250 grid	375 (42.4), 275 (31.1)	CU/AL
220A-370A	Fuse Block	None	(2) 4 AWG - 500 MCM	450 (51)	CU/AL
220A-370A	Fuse Disconnect	None	(2) 2 AWG - 600 MCM	500 (57)	CU/AL
260A-370A	Eaton PD	65kA & 100kA	(2) 2-500 MCM	375 (42)	CU/AL
300A-370A	LSIS	65kA & 100kA	(2) 2/0 - 500 MCM	360 (40.5)	CU/AL
300A-370A	Terminal Block	None	(2) 4 AWG - 500 kcmil	450 (51)	CU/AL
450A-520A	LSIS	65kA & 100kA	(3) 3/0 - 400 MCM	400 (45)	CU/AL
450A-520A	Terminal Block	None	(2) 600Kcmil-2Awg, (4) 6 AWG - 350MCM	500 (56.5), 275 (31.1)	CU/AL
All	Control Terminal	All	28 to 14 AWG	4.4 (0.5)	N/A

Filter, Ground Terminal Wire Size & Tightening Torque			
Filter Size	Wire Size	Torque In-Lbs (Nm)	Wire Type
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150A*/185A	6 AWG - 250 MCM	375 (42.4)	CU/AL
220A**	3 AWG - 500 MCM	375 (42.4)	CU/AL
220A*/260A	(2) 4 AWG - 600 MCM	500 (57)	CU/AL
300A/370A	(2) 4 AWG - 600 MCM	500 (57)	CU/AL
450A/520A	(3) 2 AWG - 600 MCM	500 (57)	CU/AL

Transformer Terminals							
Size	Primary Power Terminals		Secondary Power Terminals		Ground Lug		Wire Type
	Wire Size	Torque In-Lbs (Nm)	Wire Size	Torque In-Lbs (Nm)	Wire Size	Torque In-Lbs (Nm)	
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110/150 Amp	300MCM -6 AWG	240 (27)	300MCM -6 AWG	240 (27)	2-14 AWG	84 (9.5)	CU/AL
185/220 Amp	600MCM-6AWG	360 (41)	600MCM-6AWG	360 (41)	2-14 AWG	84 (9.5)	CU/AL
300 to 370 Amp	PADS	360 (41)	PADS	360 (41)	6-2/0 AWG	84 (9.5)	CU/AL
450 to 520 Amp	PADS	360 (41	PADS	360 (41)	6-300 MCM	84 (9.5)	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.

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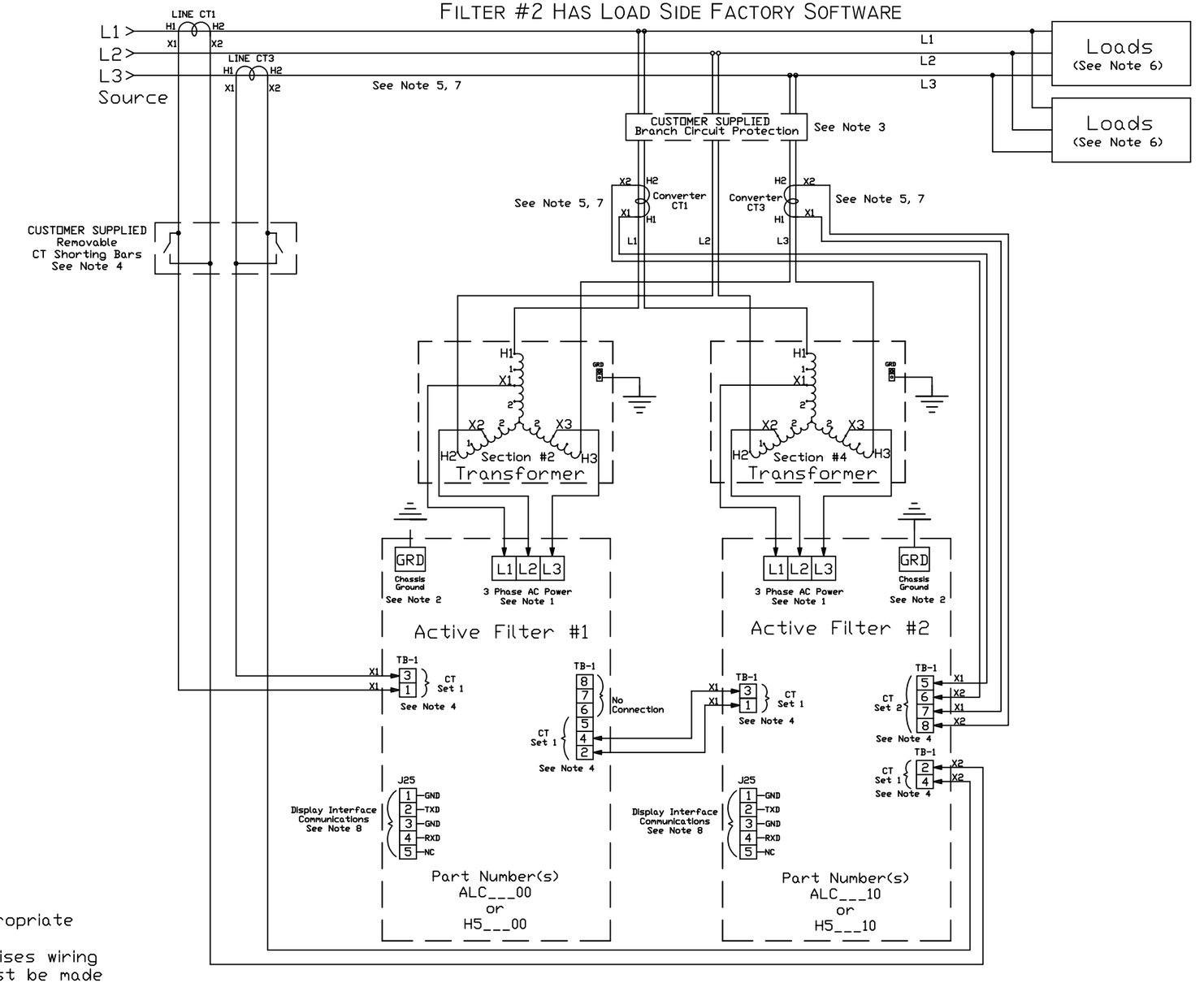
6.) Load(s) have an integral 3% line reactance or equivalent dc bus choke to optimize Active Filter utilization, consult TCI for Active Filter capacity with less than 3%.

7.) CT's are customer installed, and external to the Active Filter.

8.) Available network interface depends on CM Module HMI option. Reference the HGA IOM and HMI Installation Drawing 28283-1

Two Filters In Parallel:
Filter #1 Has Standard Line Side CT Placement & Wiring
Filter #2 Has Load Side Factory Software



					TOLERANCES (EXCEPT AS NOTED)	W132 N10611 Grant Drive Germantown, WI 53022 © TCI, 2021
					DECIMAL .XX ±.03 .XXX±.010	An Allied Motion Company
					FRACTIONAL ±1/32	600 Volt Active Filter Conn. Diagram
	SEE PAGE 1 FOR REV				ANGULAR ±1°	DRN. BY RHW · DATE 4/30/13 · DWG. NO. 28425
NO	REVISION	DATE	BY		SCALE N/A	SIZE B · SHT. 2 OF 2