ASSEMBLY INTRODUCTION

C&H Technology is a leading manufacturer of high power diode, thyristor and IGBT assemblies. We offer a large portfolio of standard assemblies in single and three phase configurations of diode bridge, thyristor bridge, and AC-switch circuits. These assemblies are classified in current ranges between 50A to 50,000A, and voltage ranges from 100V to 8,500V.

With our large inventory of thermal management solutions and high-power semiconductors, C&H Technology can offer many custom solutions. These sub-assemblies can be engineered using natural convection, forced air convection, and liquid cooled configurations.

Visit our website and use the assembly configuration tool to help build the correct assembly part number based on your specific application and parameters.

Additional value-added accessories include the following:

- Semiconductor Fuses
- Terminal Blocks
- Copper Bus Bars
- Bimetallic Thermal Switches
- Thermistors
- Snubber Circuits
- MOV's
- Glastic Mounting Feet
- Leads
- Jumpers

Our products are used worldwide in all industrial sectors including:

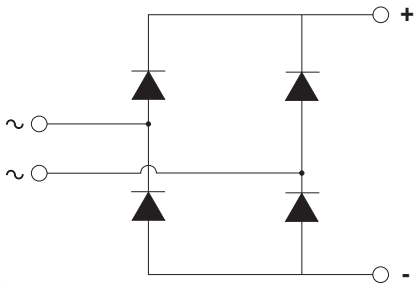
Welding Power Supplies	Electric Vehicles	Transportation
Battery Chargers	Power Supplies	Power Generation
Steel Mills	Forklifts	Wind Turbines
Aluminum Smelters	Overhead Cranes	Solar Inverters
Mining Equipment	Industrial Motor Control	And Many Others…

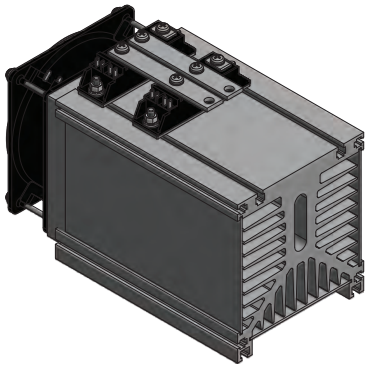
Call 800-274-4284 or email sales@chtechnology.com for questions or custom solutions.



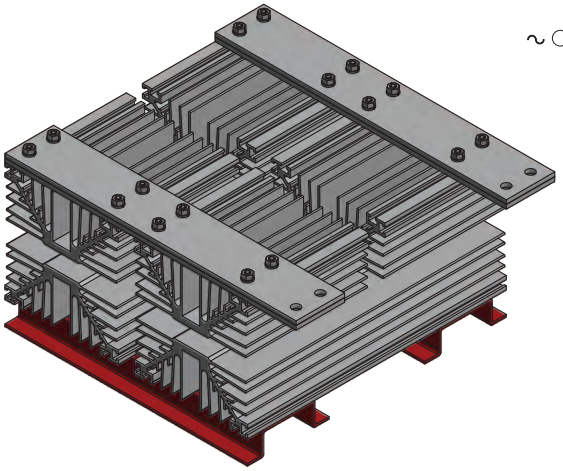


SINGLE PHASE DIODE BRIDGE



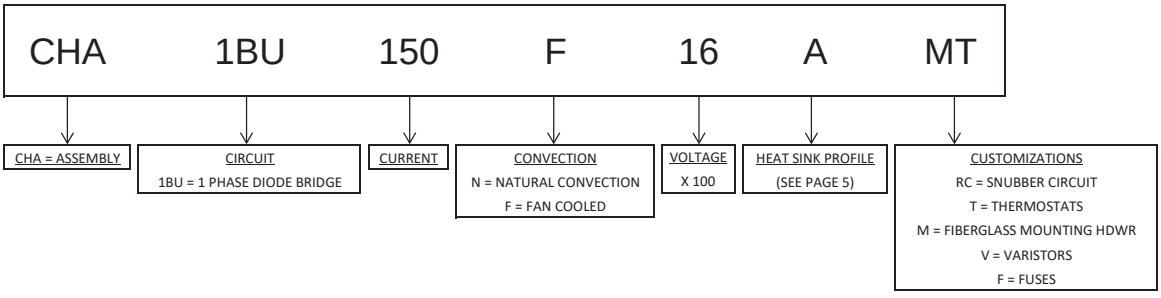


Outline 1



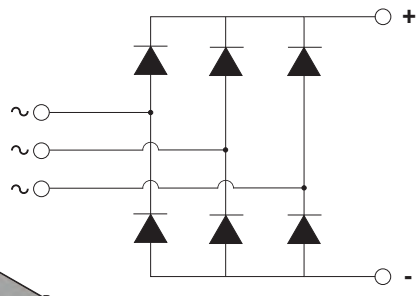
Outline 16

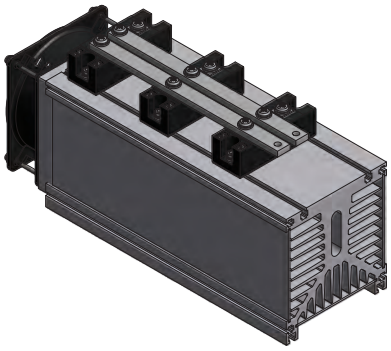
Output Current I (avg) Maximum Ambient Temperature = 45°C						
Natural Convection	Fan Cooled				Assembly	
0 LFM	500 LFM 2.5 m/s	1000 LFM 5.0 m/s	Device P/N	Maximum Voltage	Heat Sink Profile	Assembly Outline
90	150	---	VSKD91/..	1600	CHEHK18 (Profile A)	Assembly 1
130	230	---	VSKD236/..	1600	CHEHK18 (Profile A)	Assembly 2
160	320	---	VSKD320-..	2000	CHEHK18 (Profile A)	Assembly 3
---	475	---	VSKD320-..	2000	CH5116 (Profile J)	Assembly 31
---	900	---	VSKD600-..	2000	CH5119 (Profile K)	Assembly 32
350	640	770	SD400C..C	2400	CHEH13450 (Profile D)	Assembly 14
450	840	1050	SD1100C..C	3200	CHEH13450 (Profile D)	Assembly 14
560	1120	1330	SD1500C..L	3000	CHEH0017 (Profile F)	Assembly 16
700	1400	1680	SD2500C..K	2500	CHEH0017 (Profile F)	Assembly 35
980	2030	2450	SD3000C..K	1000	CHEH0017 (Profile F)	Assembly 35



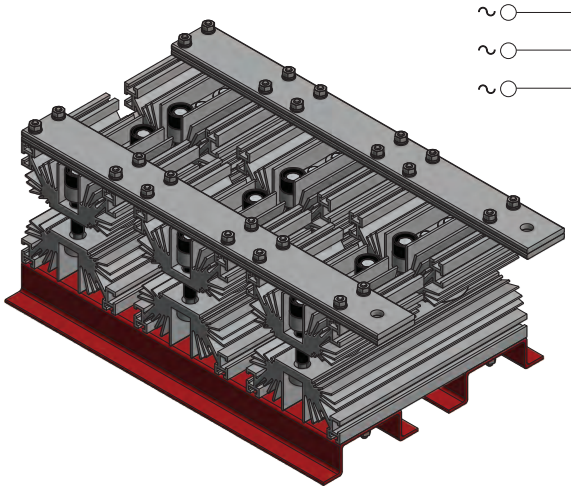
For Fully Customizable Configurations, please contact C&H Technology today.

THREE PHASE DIODE BRIDGE





Outline 5



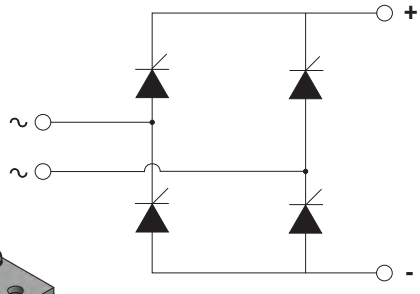
Outline 15

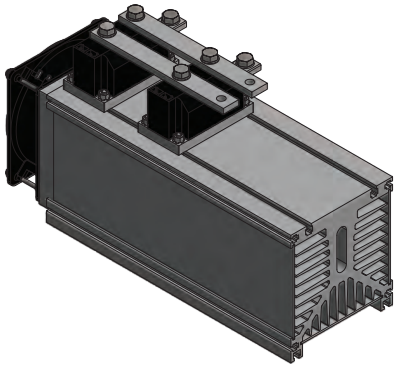
Output Current I (avg) Maximum Ambient Temperature = 45˚C						
Natural Convection	Fan Cooled				Assembly	
0 LFM	500 LFM 2.5 m/s	1000 LFM 5.0 m/s	Device P/N	Maximum Voltage	Heat Sink Profile	Assembly Outline
---	55	---	70MT160P-P	1600	CHEH3648	Assembly 71
---	---	160	200MT40KPBF	400	CH6600	Assembly 70
75	175	---	300MT..C	1800	CHEHK18 (Profile A)	Assembly 78
100	190	---	VSKD91/..	1600	CHEHK18 (Profile A)	Assembly 4
150	300	---	VSKD236/..	1600	CHEHK18 (Profile A)	Assembly 5
170	450	---	VSKD320-..	2000	CHEHK18 (Profile A)	Assembly 6
---	600	---	VSKD320-..	2000	CH5116 (Profile J)	Assembly 33
---	1100	---	VSKD600-..	2000	CH5119 (Profile K)	Assembly 34
500	920	1100	SD400C..C	2400	CHEH13450 (Profile D)	Assembly 13
650	1200	1500	SD1100C..C	3200	CHEH13450 (Profile D)	Assembly 13
800	1600	1900	SD1500C..L	3000	CHEH13450 (Profile D)	Assembly 15
1000	2000	2400	SD2500C..K	2500	CHEH0017 (Profile F)	Assembly 36
1400	2900	3500	SD3000C..K	1000	CHEH0017 (Profile F)	Assembly 36
1350	3800	4500	5SDD48H	3200	CHEH0011 (Profile G)	Assembly 72
2200	4000	5000	5SDD60Q	2800	CHEH0078 (Profile H)	Assembly 73

CHA	3BU	190	F	16	A	MT
CHA = ASSEMBLY	CIRCUIT 3BU = 3 PHASE DIODE BRIDGE	CURRENT	CONVECTION N = NATURAL CONVECTION F = FAN COOLED	VOLTAGE X 100	HEAT SINK PROFILE (SEE PAGE 5)	CUSTOMIZATIONS RC = SNUBBER CIRCUIT T = THERMOSTATS M = FIBERGLASS MOUNTING HDWR V = VARISTORS F = FUSES

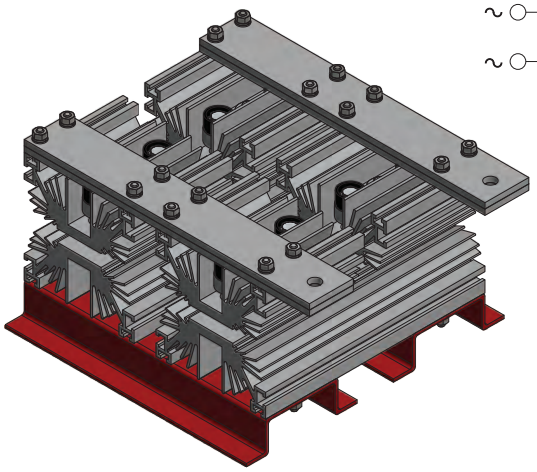
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SINGLE PHASE THYRISTOR BRIDGE





Outline 3



Outline 38

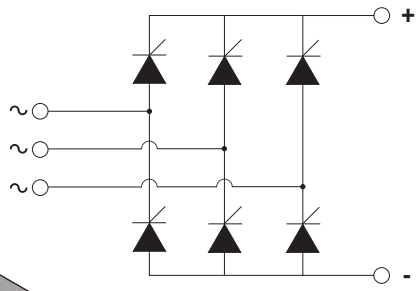
Output Current I (avg) Maximum Ambient Temperature = 45˚C						
Natural Convection	Fan Cooled				Assembly	
0 LFM	500 LFM 2.5 m/s	1000 LFM 5.0 m/s	Device P/N	Maximum Voltage	Heat Sink Profile	Assembly Outline
65	125	---	VSKT91/..	1600	CHEHK18 (Profile A)	Assembly 1
105	200	---	VSKT162/..	1600	CHEHK18 (Profile A)	Assembly 2
130	240	---	VSKT250-..	1600	CHEHK18 (Profile A)	Assembly 3
---	450	---	VSKT250-..	1600	CH5116 (Profile J)	Assembly 31
---	700	---	VSKT570-..	1800	CH5119 (Profile K)	Assembly 37
200	400	480	ST180C..C0	2000	CHEH13450 (Profile D)	Assembly 14
250	520	650	ST330C..C0	1800	CHEH13450 (Profile D)	Assembly 14
240	460	580	5STP04D	4200	CHEH13450 (Profile D)	Assembly 38
490	980	1150	5STP16F	2800	CHEH0017 (Profile F)	Assembly 35
560	1150	1400	5STP18F	1800	CHEH0017 (Profile F)	Assembly 35
900	1850	2000	AT607S..	800	CHEH0011 (Profile G)	Assembly 18
1280	2370	2510	5STP27H	2800	CHEH0078 (Profile H)	Assembly 20

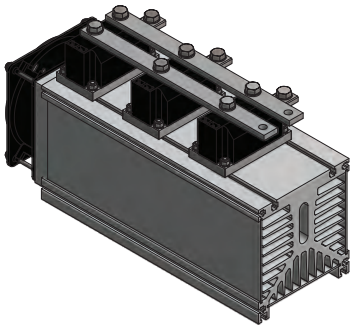
CHA 1BF 125 F 16 A MT

- CHA = ASSEMBLY
- CIRCUIT
  - 1BH = 1 PHASE SCR BRIDGE (HALF CONTROLLED)
  - 1BF = 1 PHASE SCR BRIDGE (FULLY CONTROLLED)
- CURRENT
- CONVECTION
  - N = NATURAL CONVECTION
  - F = FAN COOLED
- VOLTAGE
  - X 100
- HEAT SINK PROFILE
  - (SEE PAGE 5)
- CUSTOMIZATIONS
  - RC = SNUBBER CIRCUIT
  - T = THERMOSTATS
  - M = FIBERGLASS MOUNTING HDWR
  - V = VARISTORS
  - F = FUSES

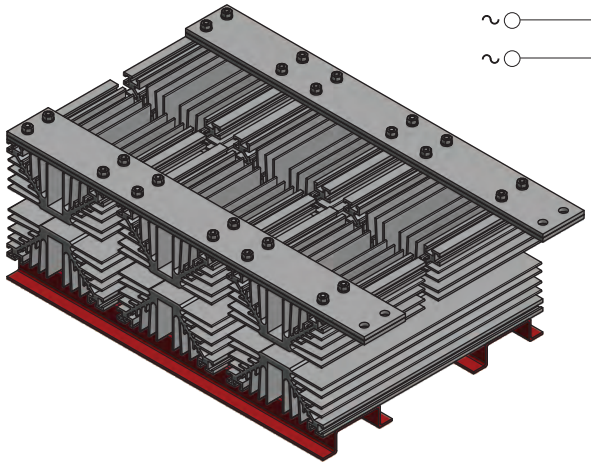
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THREE PHASE THYRISTOR BRIDGE





Outline 6



Outline 36

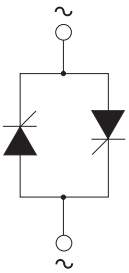
Output Current I (avg) Maximum Ambient Temperature = 45˚C						
Natural Convection	Fan Cooled				Assembly	
0 LFM	500 LFM 2.5 m/s	1000 LFM 5.0 m/s	Device P/N	Maximum Voltage	Heat Sink Profile	Assembly Outline
68	140	---	VSKT91/..	1600	CHEHK18 (Profile A)	Assembly 4
110	240	---	VSKT162/..	1600	CHEHK18 (Profile A)	Assembly 5
140	360	---	VSKT250-..	1600	CHEHK18 (Profile A)	Assembly 6
200	420	510	ST180C..C0	2000	CHEH13450 (Profile D)	Assembly 13
---	450	---	VSKT250-..	1600	CH5116 (Profile J)	Assembly 33
300	630	800	ST330C..C0	1800	CHEH13450 (Profile D)	Assembly 13
380	790	980	5STP04D	4200	CHEH13450 (Profile D)	Assembly 51
---	900	---	VSKT570-..	1800	CH5119 (Profile K)	Assembly 39
---	1000	---	PD43..07	1800	CH5119 (Profile K)	Assembly 74
700	1550	1850	5STP16F	2800	CHEH0017 (Profile F)	Assembly 36
800	1750	2100	5STP18F	1800	CHEH0017 (Profile F)	Assembly 36
1200	2240	2560	AT607S..	800	CHEH0011 (Profile G)	Assembly 17
1825	3390	3590	5STP27H	2800	CHEH0078 (Profile H)	Assembly 19
---	3500	4200	5STP45Q	2800	CHEH0078 (Profile H)	Assembly 73

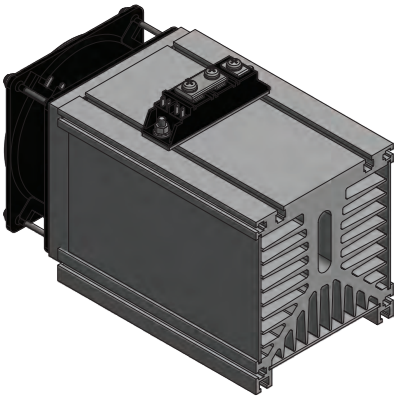
CHA | 3BF | 140 | F | 16 | A | MT

- CHA = ASSEMBLY
- CIRCUIT: 3BH = 3 PHASE SCR BRIDGE (HALF CONTROLLED); 3BF = 3 PHASE SCR BRIDGE (FULLY CONTROLLED)
- CURRENT
- CONVECTION: N = NATURAL CONVECTION; F = FAN COOLED
- VOLTAGE: X 100
- HEAT SINK PROFILE: (SEE PAGE 5)
- CUSTOMIZATIONS: RC = SNUBBER CIRCUIT; T = THERMOSTATS; M = FIBERGLASS MOUNTING HDWR; V = VARISTORS; F = FUSES

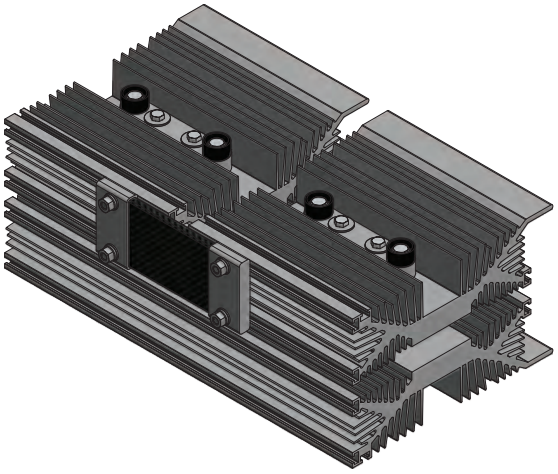
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SINGLE PHASE AC SWITCH



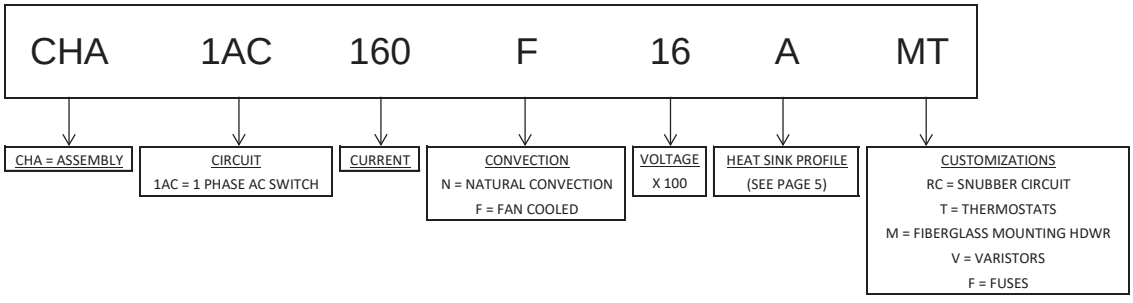


Outline 7



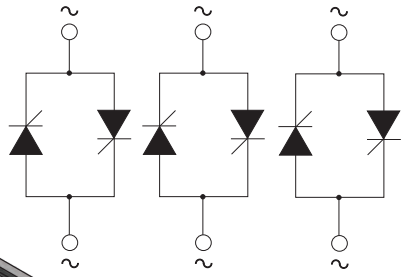
Outline 12

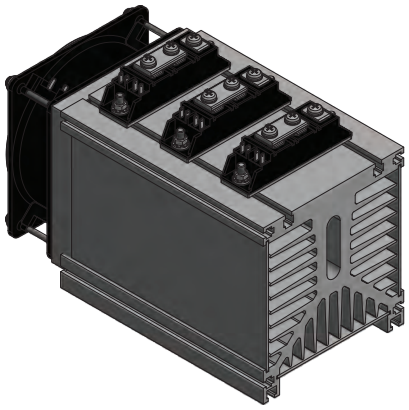
Output Current I (avg) Maximum Ambient Temperature = 45˚C						
Natural Convection	Fan Cooled				Assembly	
0 LFM	500 LFM 2.5 m/s	1000 LFM 5.0 m/s	Device P/N	Maximum Voltage	Heat Sink Profile	Assembly Outline
100	160	---	VSKT91/..	1600	CHEHK18 (Profile A)	Assembly 7
170	270	---	VSKT162/..	1600	CHEHK18 (Profile A)	Assembly 8
220	400	---	VSKT250-..	1600	CHEHK18 (Profile A)	Assembly 9
300	600	730	ST330C..C	1800	CHEH13450 (Profile D)	Assembly 10
---	725	---	VSKT570..18	1800	CH5117	Assembly 76
500	950	1100	5STP08D	2800	CHEHK7 (Profile E)	Assembly 21
---	1100	---	PA43..06	2400	CH5117	Assembly 75
600	1200	1350	5STP16F	2800	CHEH0011 (Profile G)	Assembly 12
650	1250	1450	5STP18F	1800	CHEH0011 (Profile G)	Assembly 12
950	1800	1970	AT607S..	800	CHEH0011 (Profile G)	Assembly 12
1420	2540	2700	5STP27H	2800	CHEH0078 (Profile H)	Assembly 23



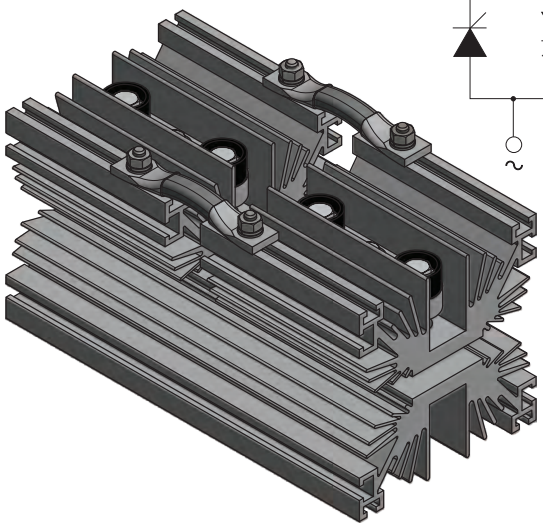
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THREE PHASE AC SWITCH



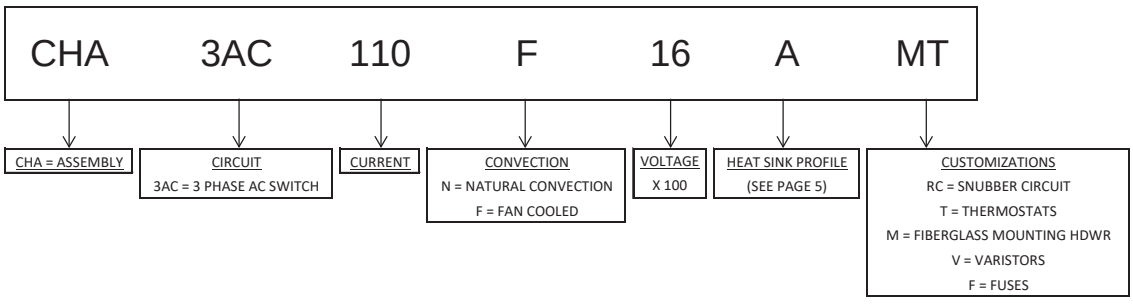


Outline 55



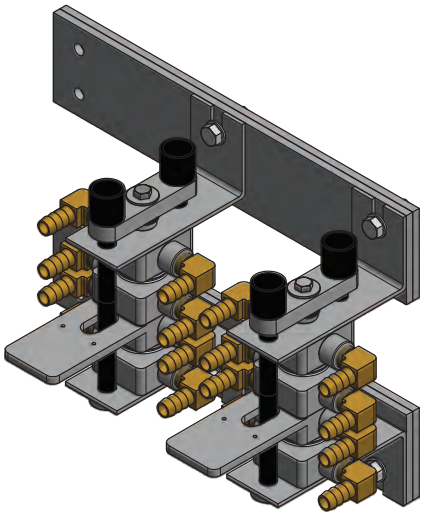
Outline 10

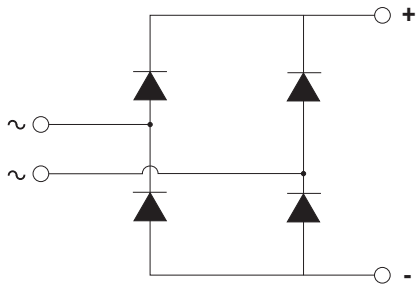
Output Current I (avg) Maximum Ambient Temperature = 45˚C						
Natural Convection	Fan Cooled				Assembly	
0 LFM	500 LFM 2.5 m/s	1000 LFM 5.0 m/s	Device P/N	Maximum Voltage	Heat Sink Profile	Assembly Outline
55	110	---	VSKT91/..	1600	CHEHK18 (Profile A)	Assembly 55
90	170	---	VSKT162/..	1600	CHEHK18 (Profile A)	Assembly 56
100	260	---	VSKT250-..	1600	CHEHK18 (Profile A)	Assembly 57
200	400	500	ST230C..C	1800	CHEH13450 (Profile D)	Assembly 10
300	600	730	ST330C..C	1800	CHEH13450 (Profile D)	Assembly 10
---	725	---	VSKT570-..	1800	CH5121	Assembly 77
500	950	1100	5STP08D	2800	CHEHK7 (Profile E)	Assembly 21
600	1200	1350	5STP16F	2800	CHEH0011 (Profile G)	Assembly 12
650	1250	1450	5STP18F	1800	CHEH0011 (Profile G)	Assembly 12
950	1800	1970	AT607S..	800	CHEH0011 (Profile G)	Assembly 12
1420	2540	2700	5STP27H	2800	CHEH0078 (Profile H)	Assembly 23



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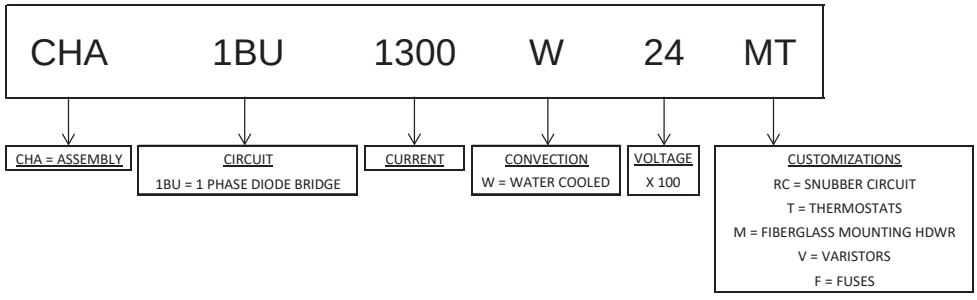
SINGLE PHASE DIODE BRIDGE





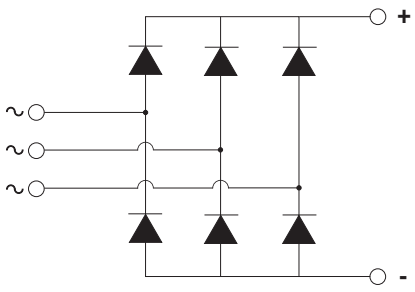
Outline 41

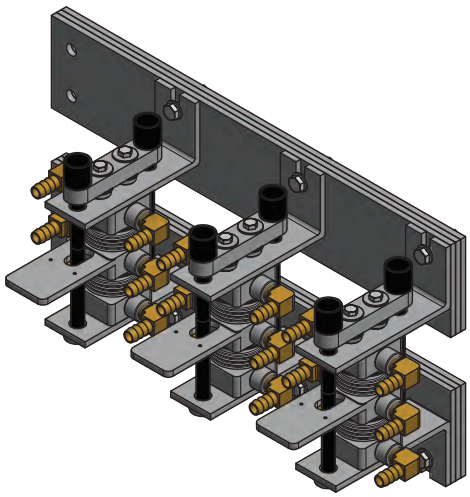
Output Current I (avg)						
Water Temp = 25˚C		Water Temp = 40˚C				
Water Flow Rate (gpm)						
1.0	2.0	1.0	2.0	Device P/N	Maximum Voltage	Assembly Outline
1300	1350	1150	1200	SD400C..C	2400	Assembly 40
1550	1600	1350	1400	SD400C..C	2400	Assembly 41
1800	1850	1600	1650	SD1100C..C	3200	Assembly 41
2200	2300	2000	2100	SD1500C..L	3000	Assembly 42
3000	3100	2700	2800	SD1500C..L	3000	Assembly 43
4600	4700	4200	4300	SD2500C..K	2500	Assembly 44
6600	6800	6200	6400	5SDD48H	3200	Assembly 45



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THREE PHASE DIODE BRIDGE





Outline 48

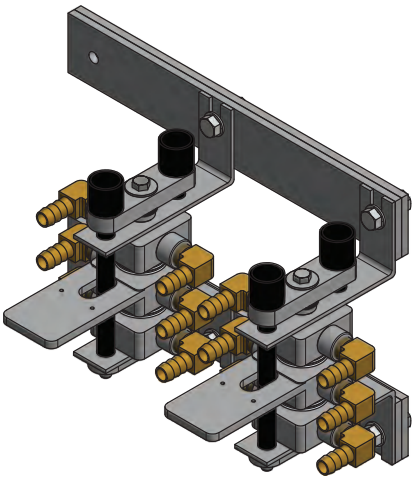
Output Current I (avg)						
Water Temp = 25˚C		Water Temp = 40˚C				
Water Flow Rate (gpm)				Device P/N	Maximum Voltage	Assembly Outline
1.0	2.0	1.0	2.0			
1800	1840	1600	1650	SD400C..C	2400	Assembly 46
2100	2150	1800	1900	SD400C..C	2400	Assembly 47
2500	2550	2200	2300	SD1100C..C	3200	Assembly 47
3000	3100	2700	2800	SD1500C..L	3000	Assembly 48
4000	4100	3600	3800	SD1500C..L	3000	Assembly 49
6300	6400	5800	5900	SD2500C..K	2500	Assembly 50
9000	9200	8500	8700	5SDD48H	3200	Assembly 52

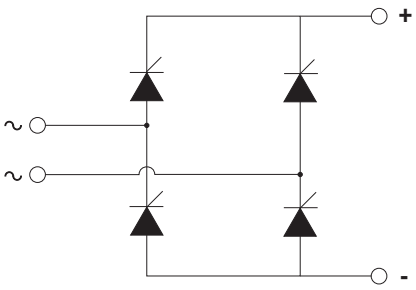
CHA 3BU 1800 W 24 MT

- CHA = ASSEMBLY
- CIRCUIT: 3BU = 3 PHASE DIODE BRIDGE
- CURRENT
- CONVECTION: W = WATER COOLED
- VOLTAGE: X 100
- CUSTOMIZATIONS:
  - RC = SNUBBER CIRCUIT
  - T = THERMOSTATS
  - M = FIBERGLASS MOUNTING HDWR
  - V = VARISTORS
  - F = FUSES

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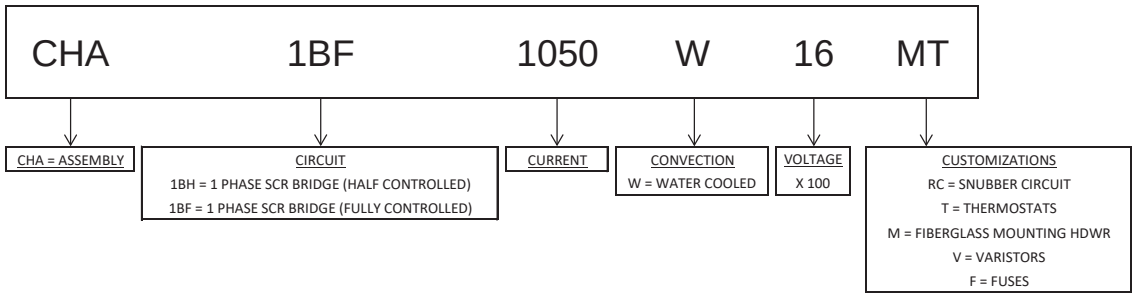
SINGLE PHASE THYRISTOR BRIDGE





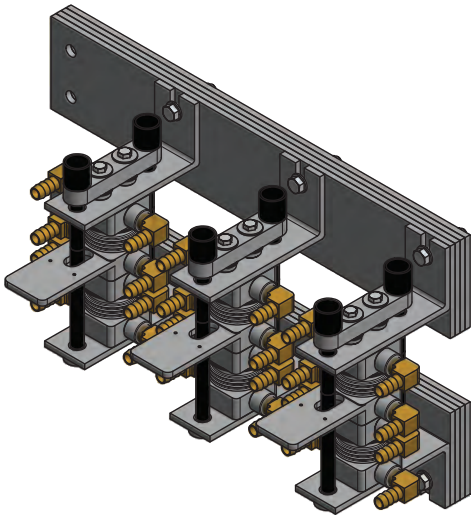
Outline 40

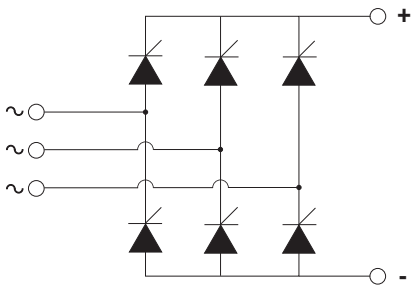
Output Current I (avg)						
Water Temp = 25˚C		Water Temp = 40˚C				
Water Flow Rate (gpm)						
1.0	2.0	1.0	2.0	Device P/N	Maximum Voltage	Assembly Outline
1050	1150	900	1000	ST330C..C0	1600	Assembly 40
1350	1450	1200	1300	ST330C..L0	1600	Assembly 42
1600	1650	1400	1450	ST730C..L0	1800	Assembly 42
2400	2650	2100	2200	ST1230C..K0	1600	Assembly 44
2900	3200	2500	2700	5STP27H	2800	Assembly 45



For Fully Customizable Configurations, please contact C&H Technology today.

THREE PHASE THYRISTOR BRIDGE





Outline 49

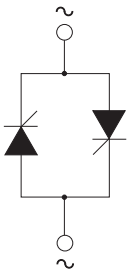
Output Current I (avg)						
Water Temp = 25˚C		Water Temp = 40˚C				
Water Flow Rate (gpm) 1.0	2.0	1.0	2.0	Device P/N	Maximum Voltage	Assembly Outline
1500	1600	1300	1400	ST330C..C0	1600	Assembly 46
1900	2000	1700	1800	ST330C..L0	1600	Assembly 48
2200	2300	2000	2100	ST730C..L0	1800	Assembly 48
3300	3600	3000	3200	ST1230C..K0	1600	Assembly 53
4000	4300	3500	3800	5STP27H	2800	Assembly 54

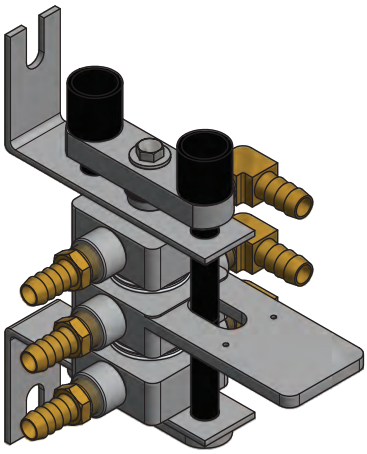
CHA 3BF 1050 W 16 MT

- CHA = ASSEMBLY
- CIRCUIT
  - 3BH = 3 PHASE SCR BRIDGE (HALF CONTROLLED)
  - 3BF = 3 PHASE SCR BRIDGE (FULLY CONTROLLED)
- CURRENT
- CONVECTION
  - W = WATER COOLED
- VOLTAGE
  - X 100
- CUSTOMIZATIONS
  - RC = SNUBBER CIRCUIT
  - T = THERMOSTATS
  - M = FIBERGLASS MOUNTING HDWR
  - V = VARISTORS
  - F = FUSES

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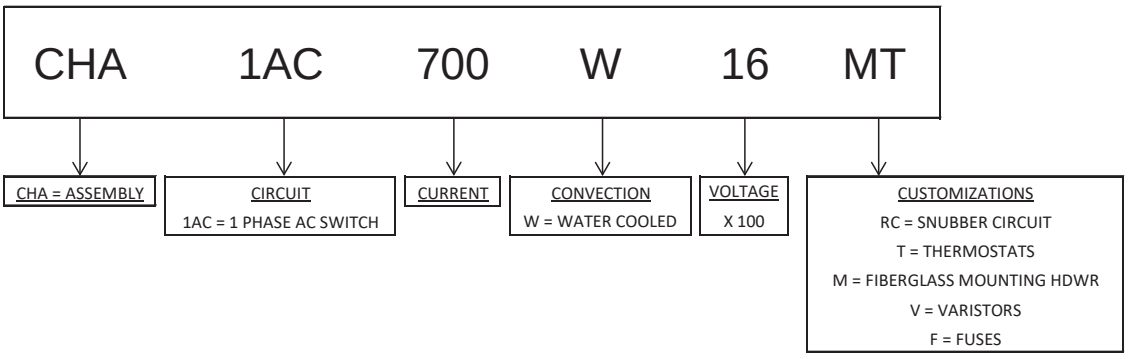
SINGLE PHASE AC SWITCH





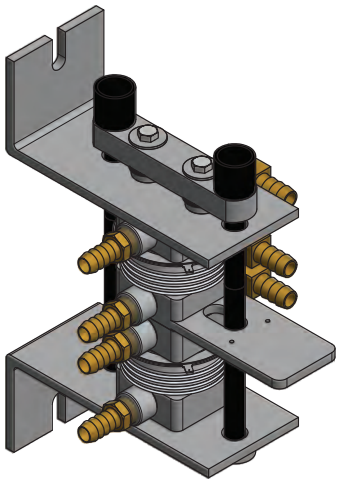
Outline 25

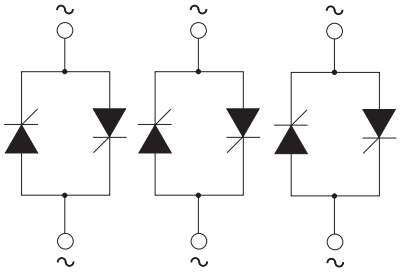
Output Current I (avg)						
Water Temp = 25˚C		Water Temp = 40˚C				
Water Flow Rate (gpm)						
1.0	2.0	1.0	2.0	Device P/N	Maximum Voltage	Assembly Outline
700	750	600	640	ST230C..C	1600	Assembly 25
1200	1300	1000	1100	ST330C..C	1600	Assembly 25
1800	2000	1500	1600	ST730C..C	1800	Assembly 27
2500	2700	2200	2400	ST1000C..C	2400	Assembly 29
2800	3000	2500	2700	ST1200C..C	2000	Assembly 30



For Fully Customizable Configurations, please contact C&H Technology today.

THREE PHASE AC SWITCH





Outline 29

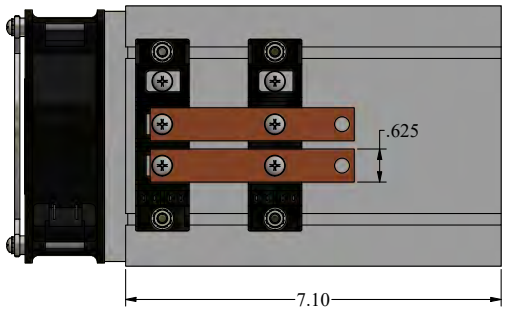
Output Current I (rms)						
Water Temp = 25˚C		Water Temp = 40˚C				
Water Flow Rate (gpm)				Device P/N	Maximum Voltage	Assembly Outline
1.0	2.0	1.0	2.0			
700	750	600	640	ST230C..C	1600	Assembly 46
1200	1300	1000	1100	ST330C..C	1600	Assembly 49
1800	2000	1500	1600	ST730C..C	1800	Assembly 52
2500	2700	2200	2400	ST1000C..C	2400	Assembly 52
2800	3000	2500	2700	ST1200C..C	2000	Assembly 54

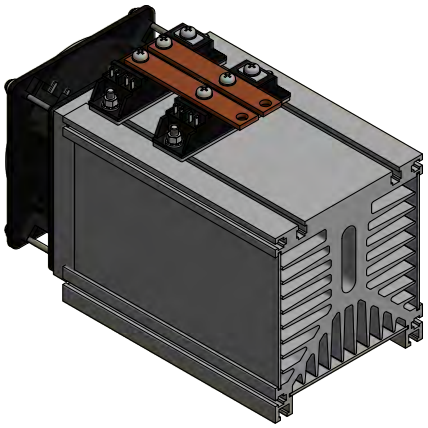
CHA 3AC 700 W 16 MT

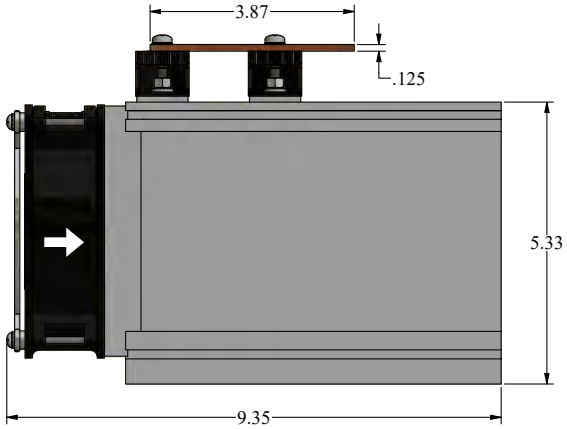
- CHA = ASSEMBLY
- CIRCUIT: 3AC = 3 PHASE AC SWITCH
- CURRENT
- CONVECTION: W = WATER COOLED
- VOLTAGE: X 100
- CUSTOMIZATIONS:
  - RC = SNUBBER CIRCUIT
  - T = THERMOSTATS
  - M = FIBERGLASS MOUNTING HDWR
  - V = VARISTORS
  - F = FUSES

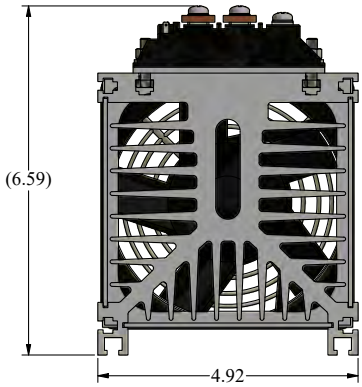
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OUTLINE 1

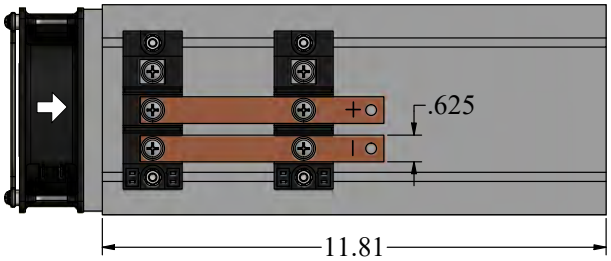


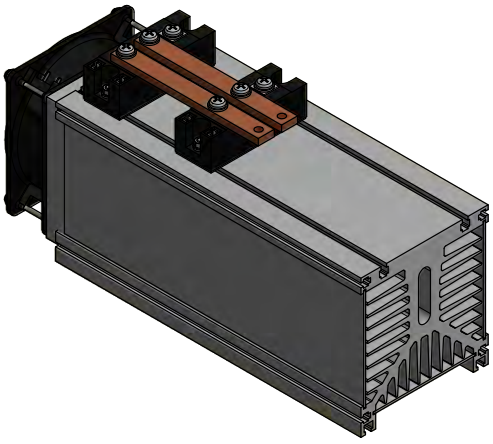


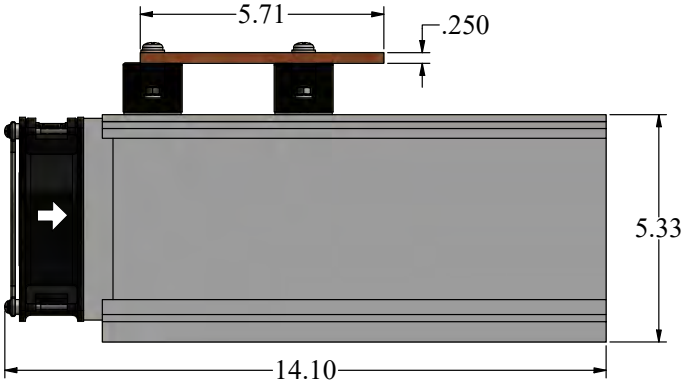


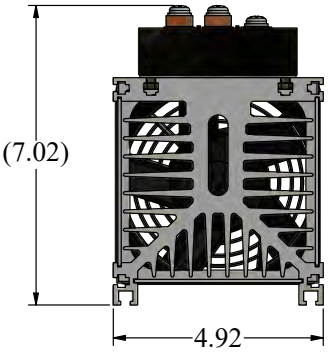


OUTLINE 2

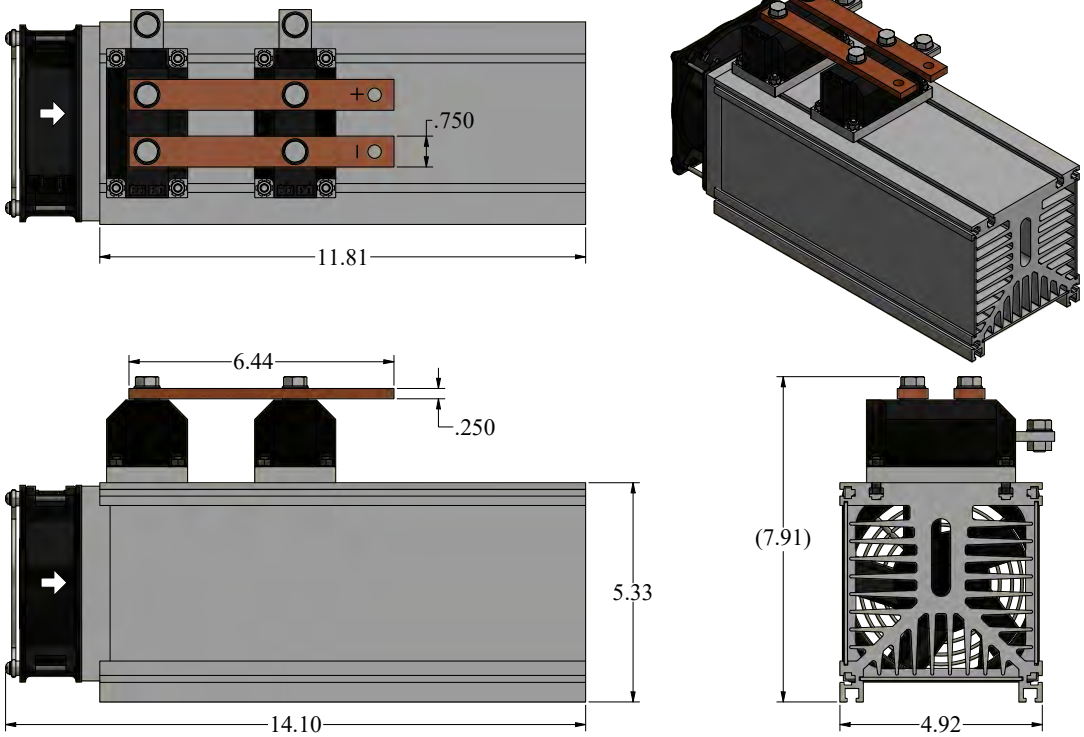




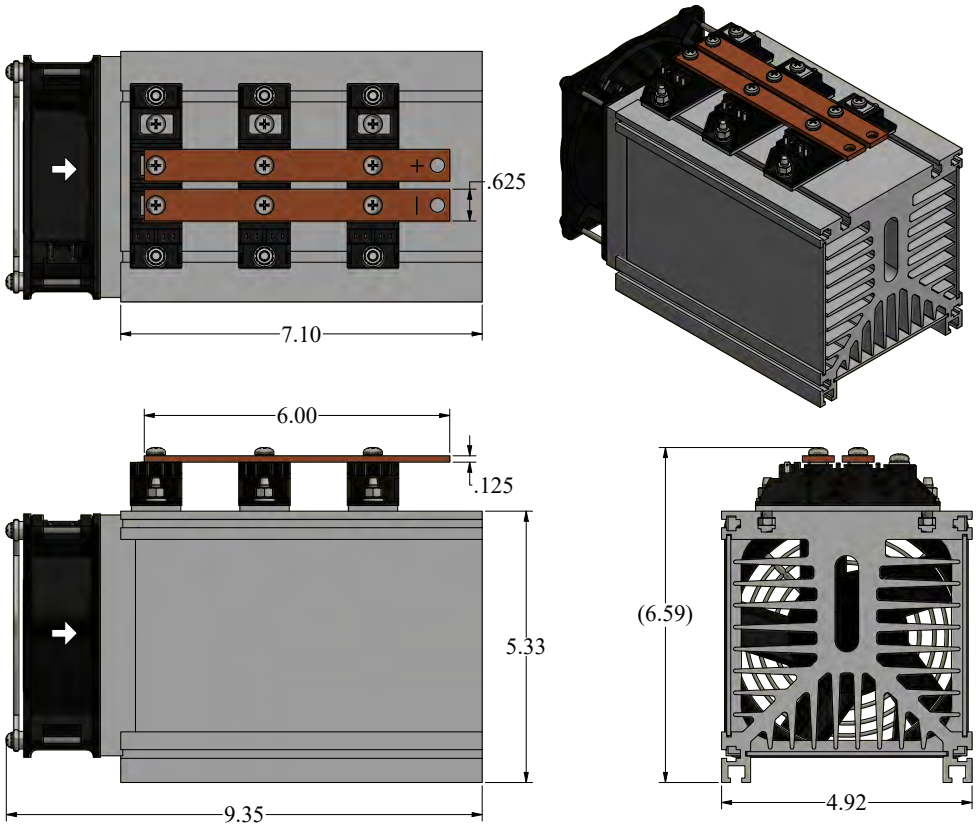




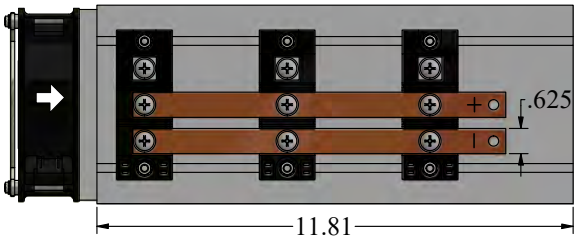
OUTLINE 3

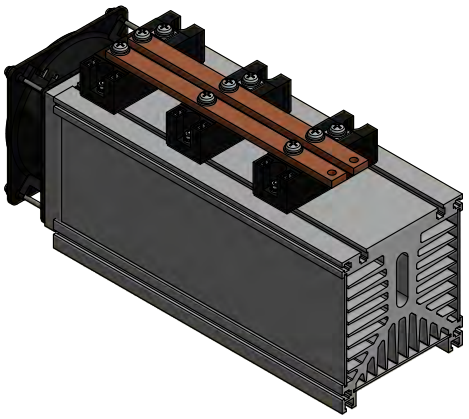


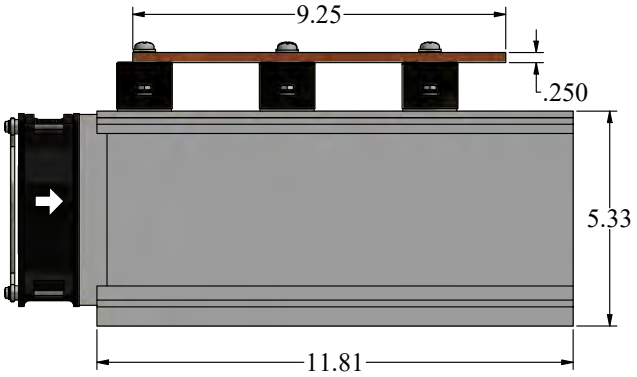
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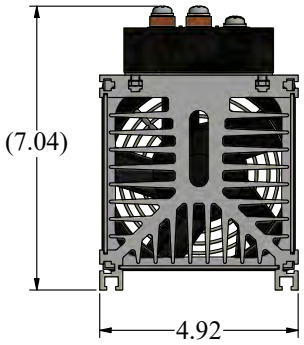


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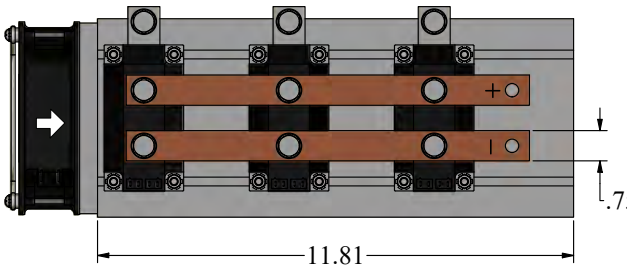


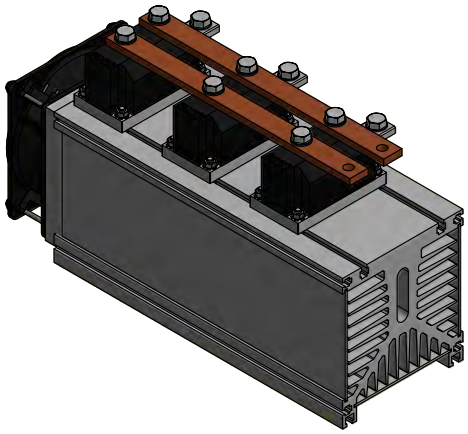


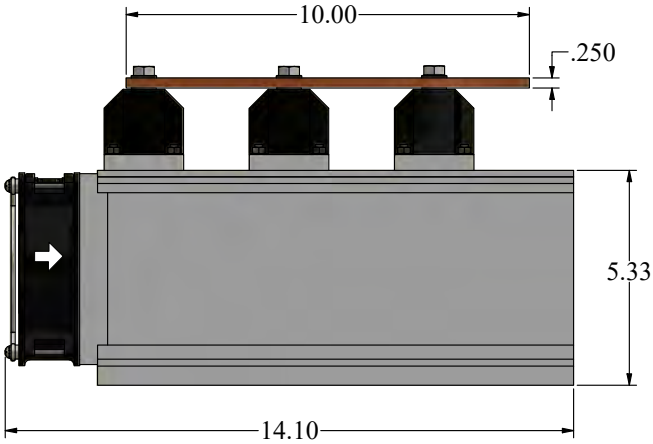


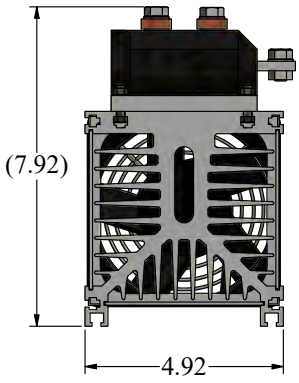


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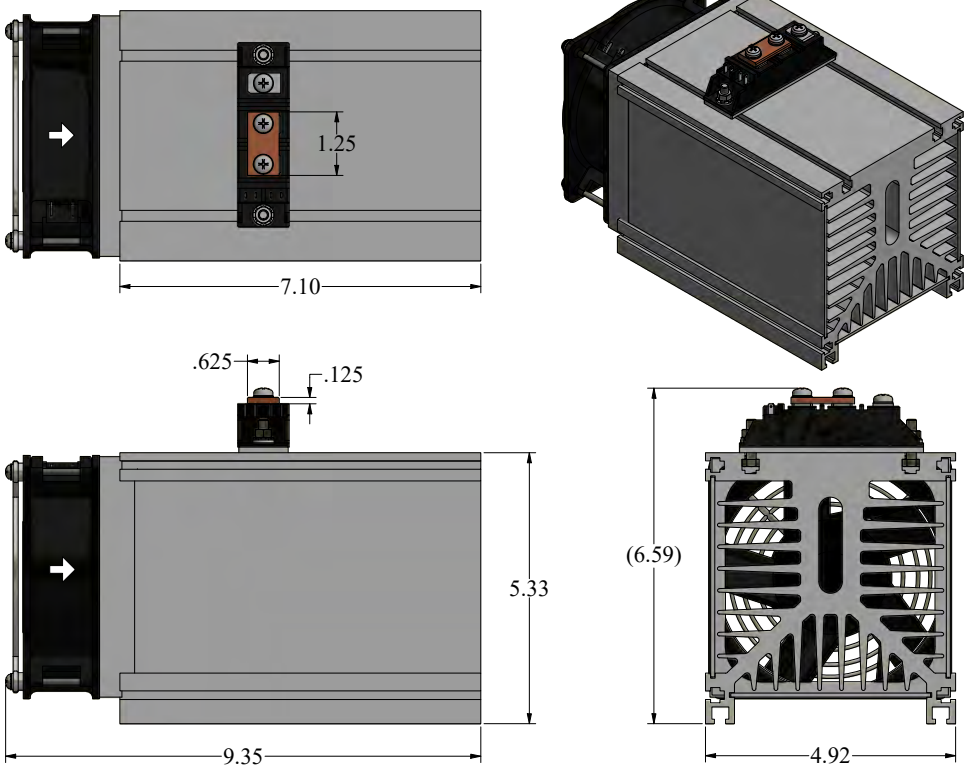




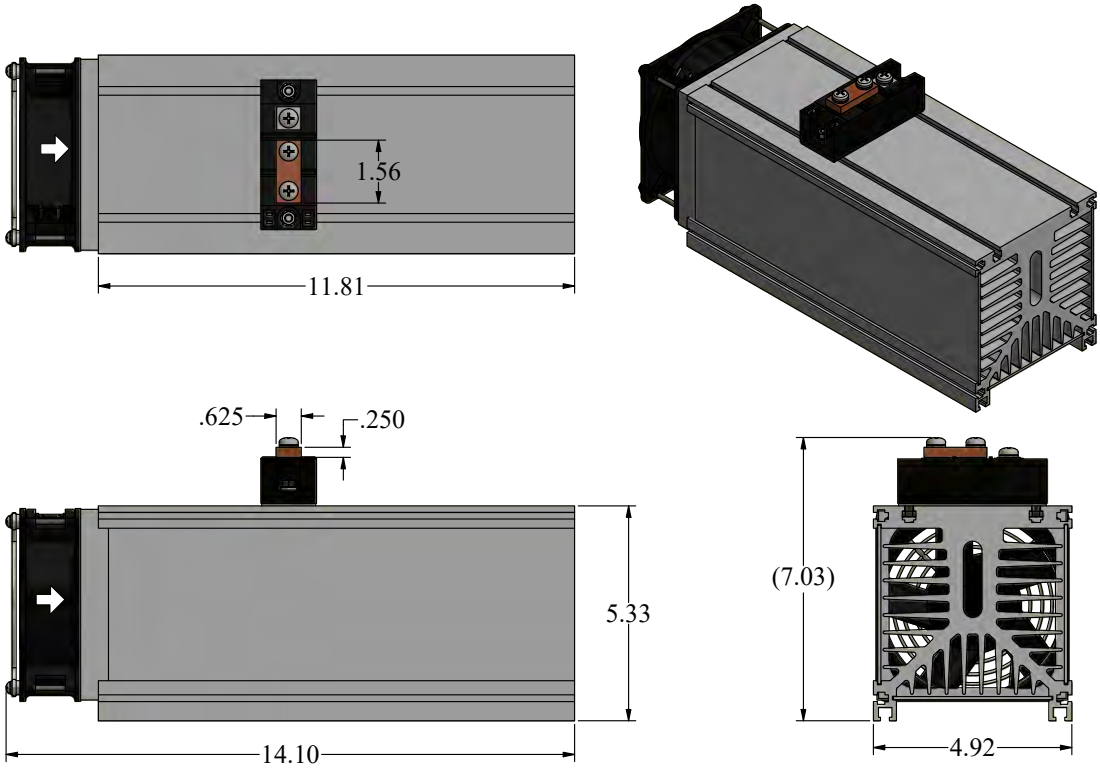




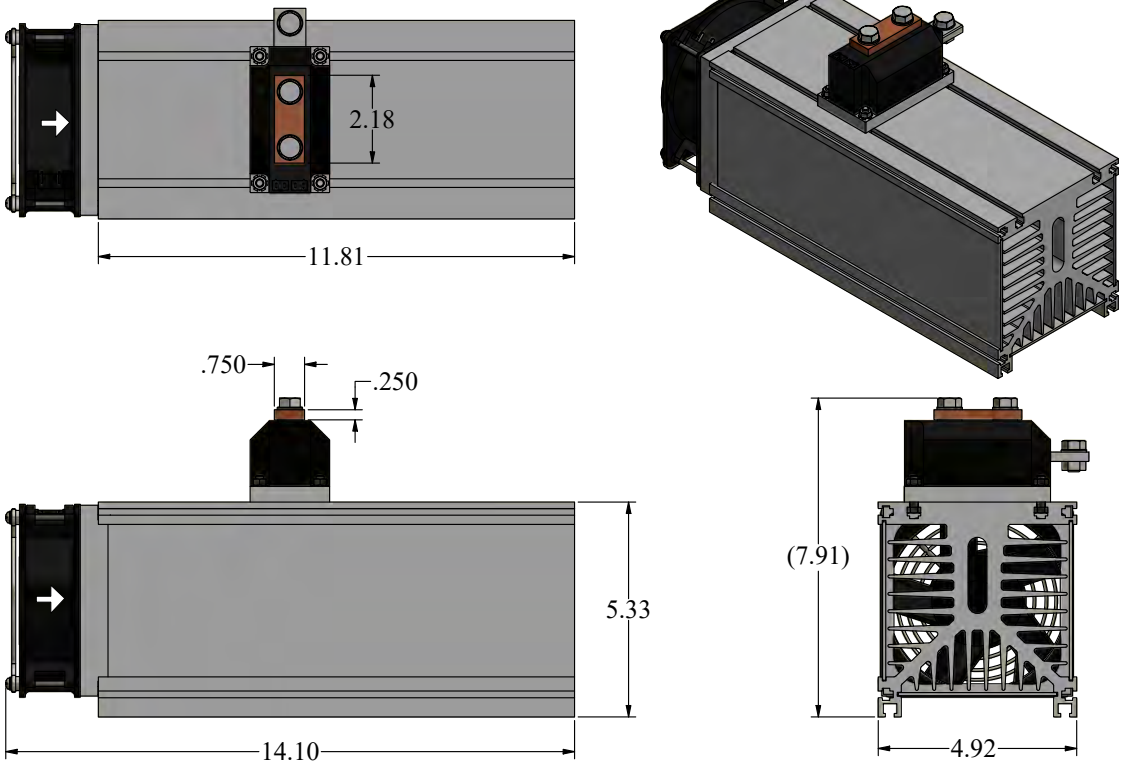
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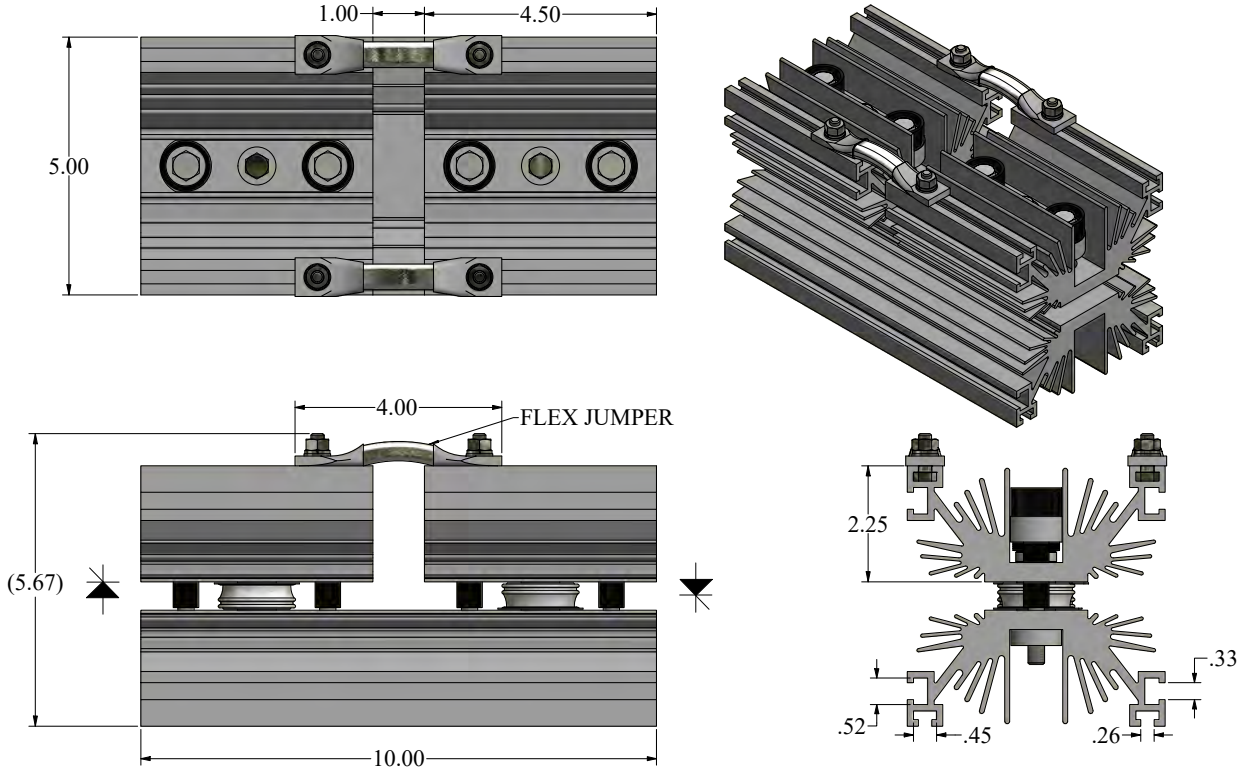
OUTLINE 8



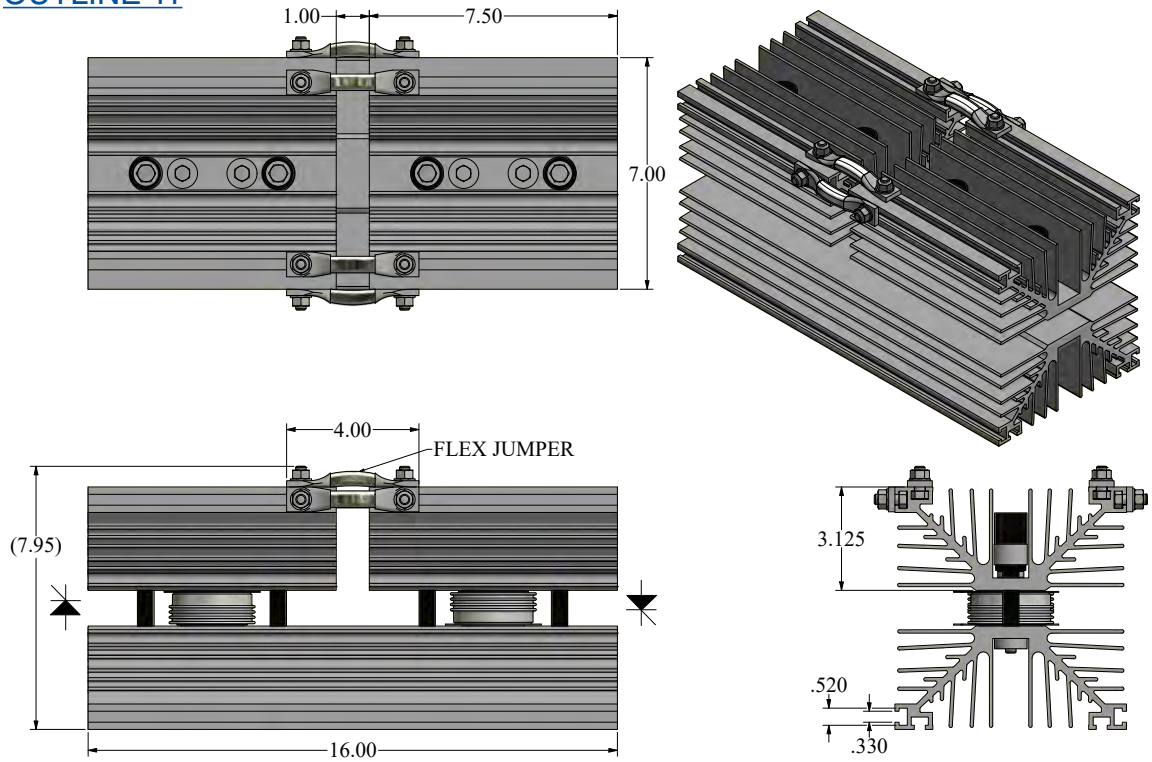
OUTLINE 9



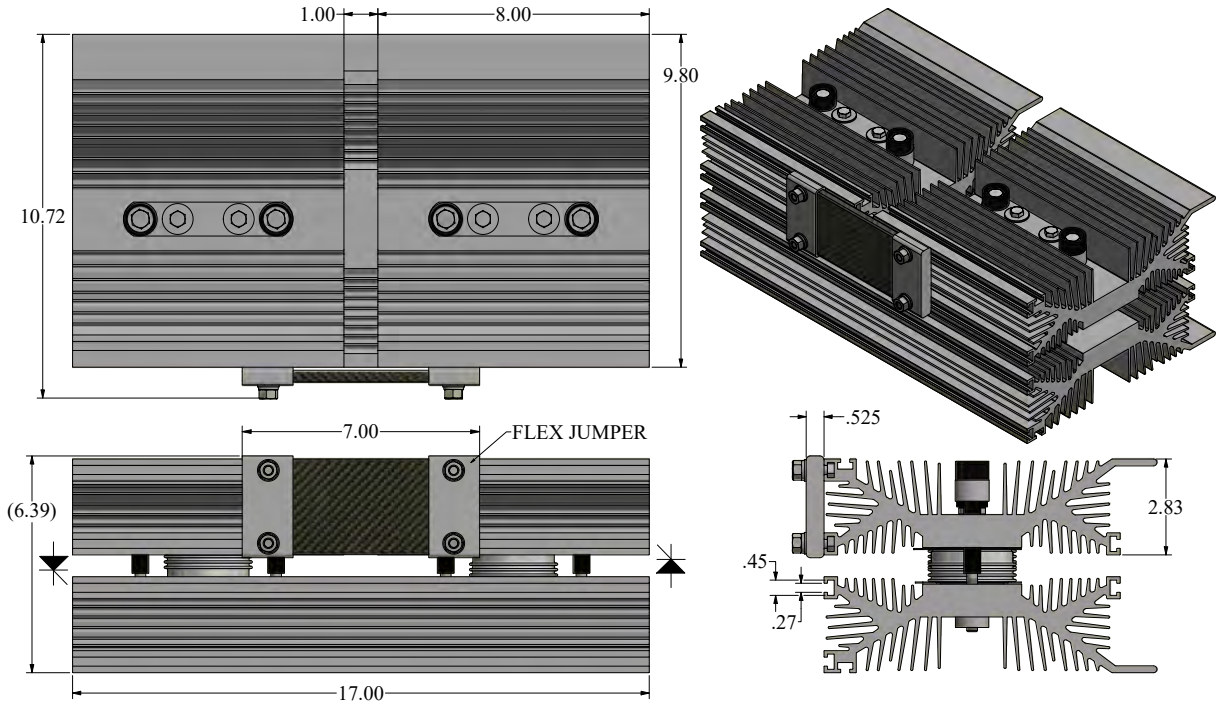
OUTLINE 10



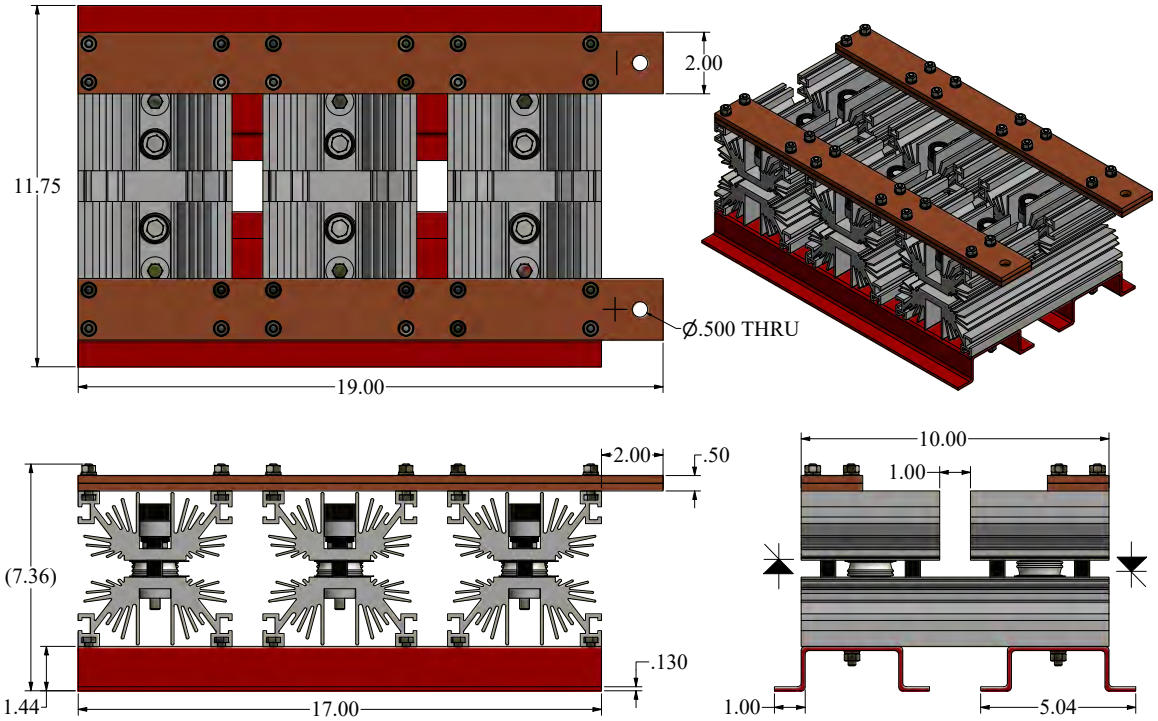
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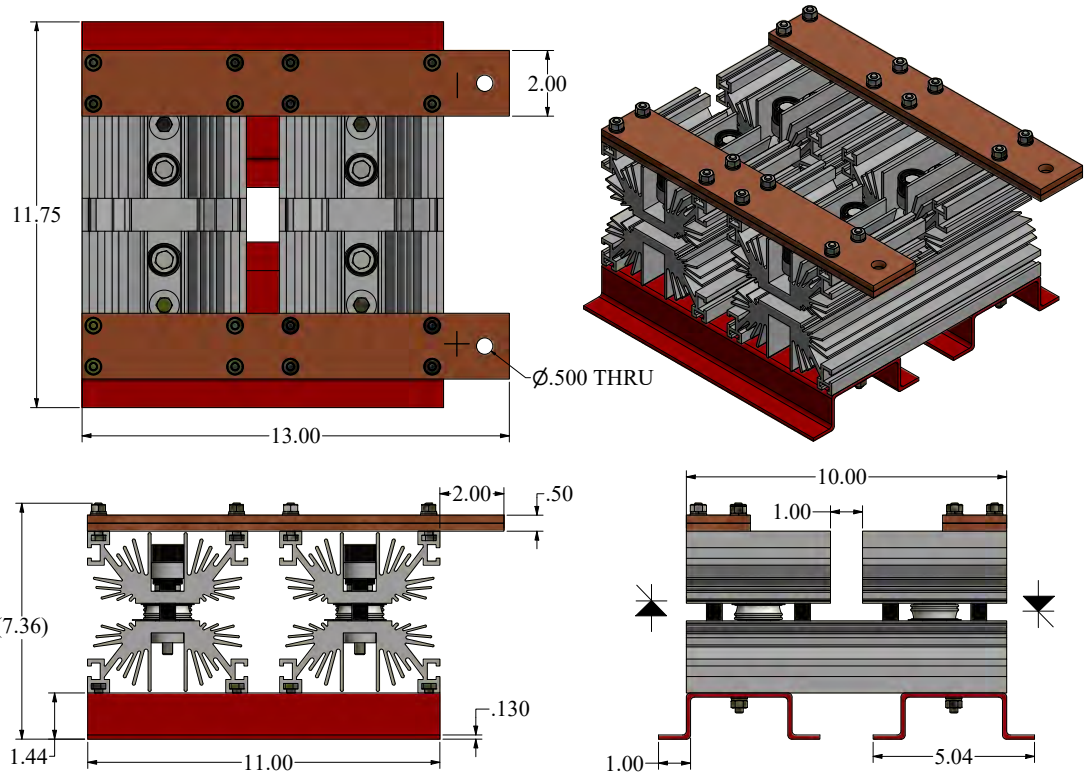
OUTLINE 12



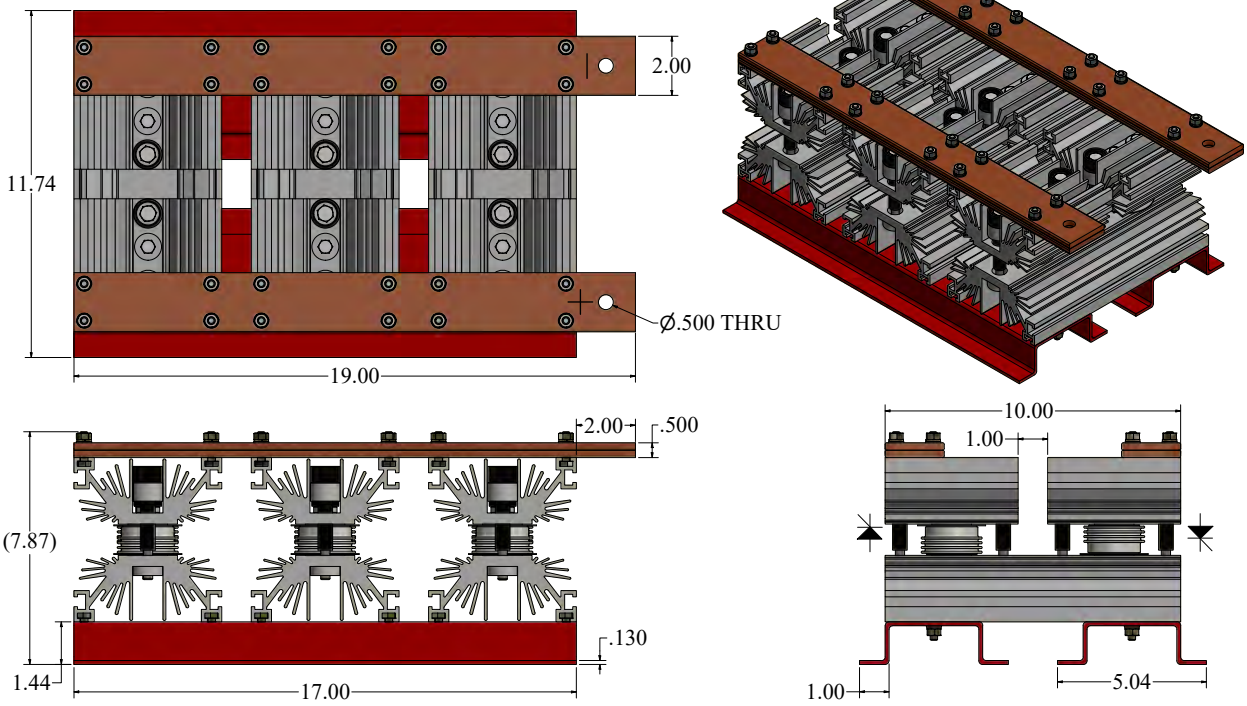
OUTLINE 13



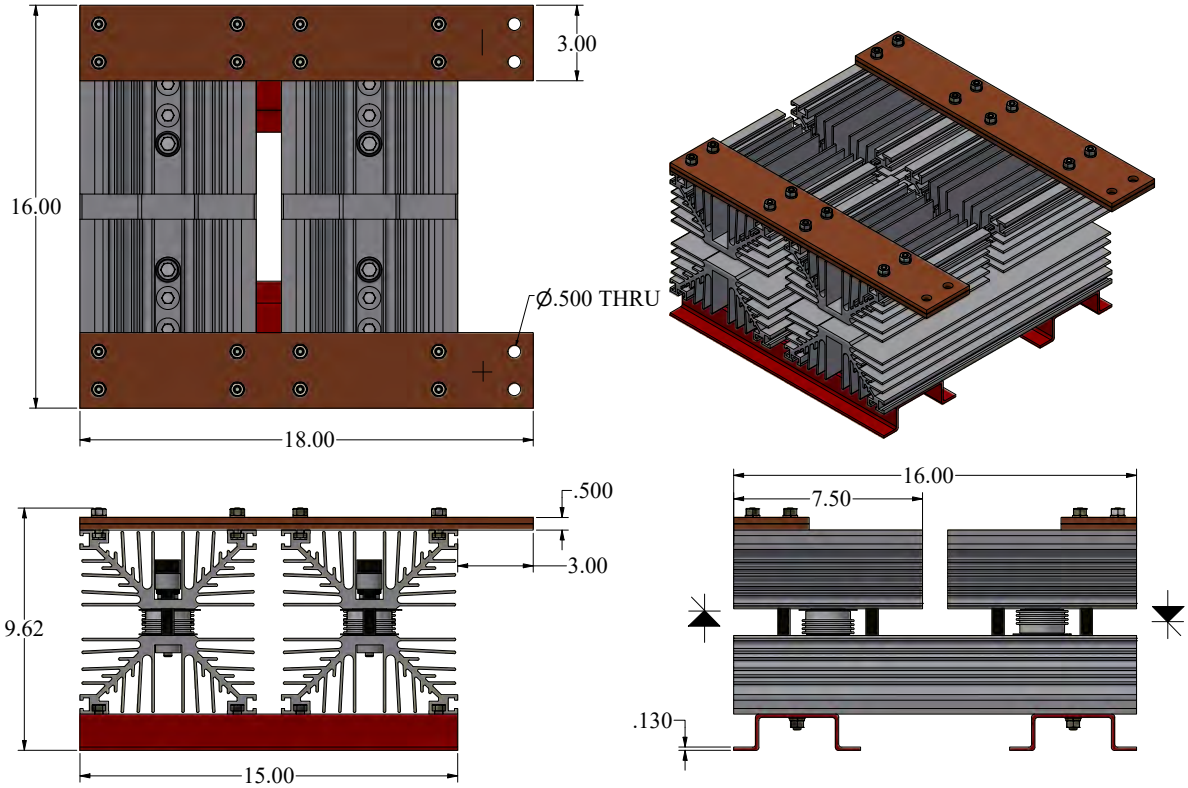
OUTLINE 14



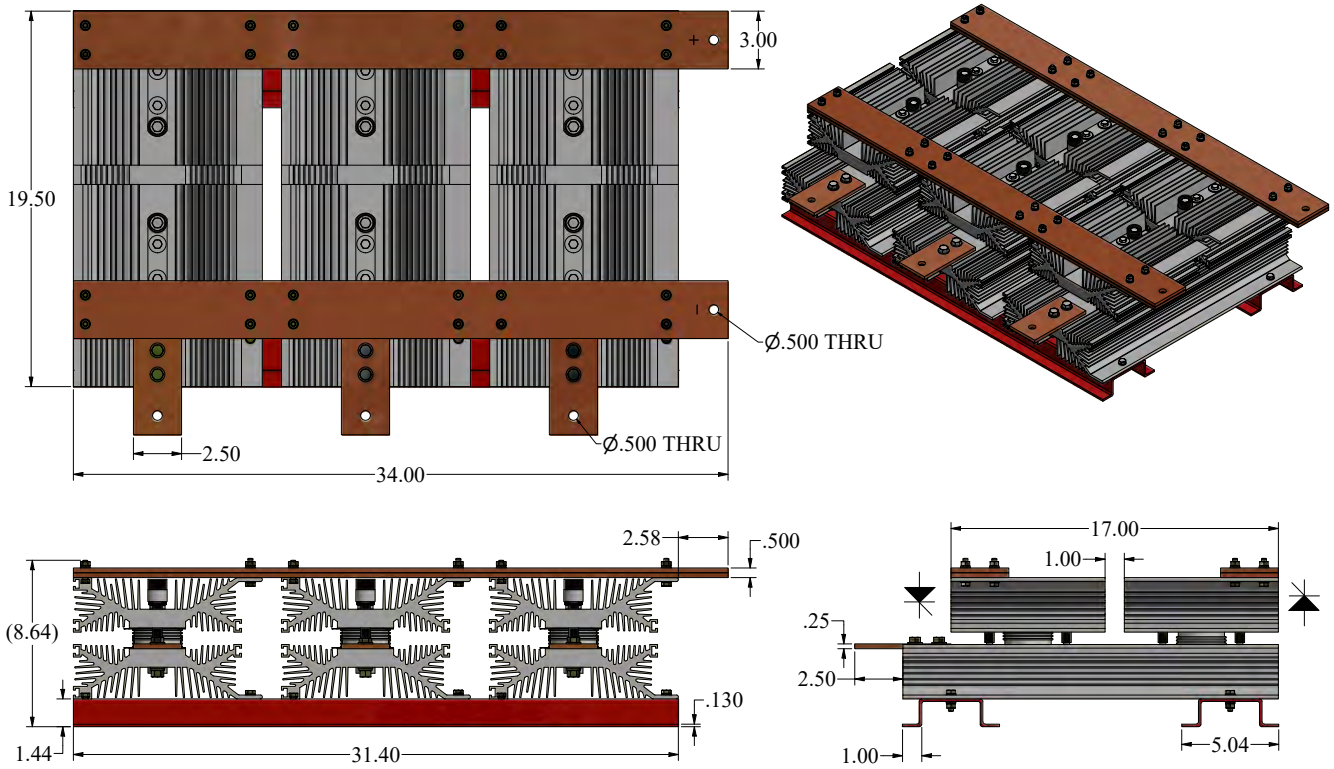
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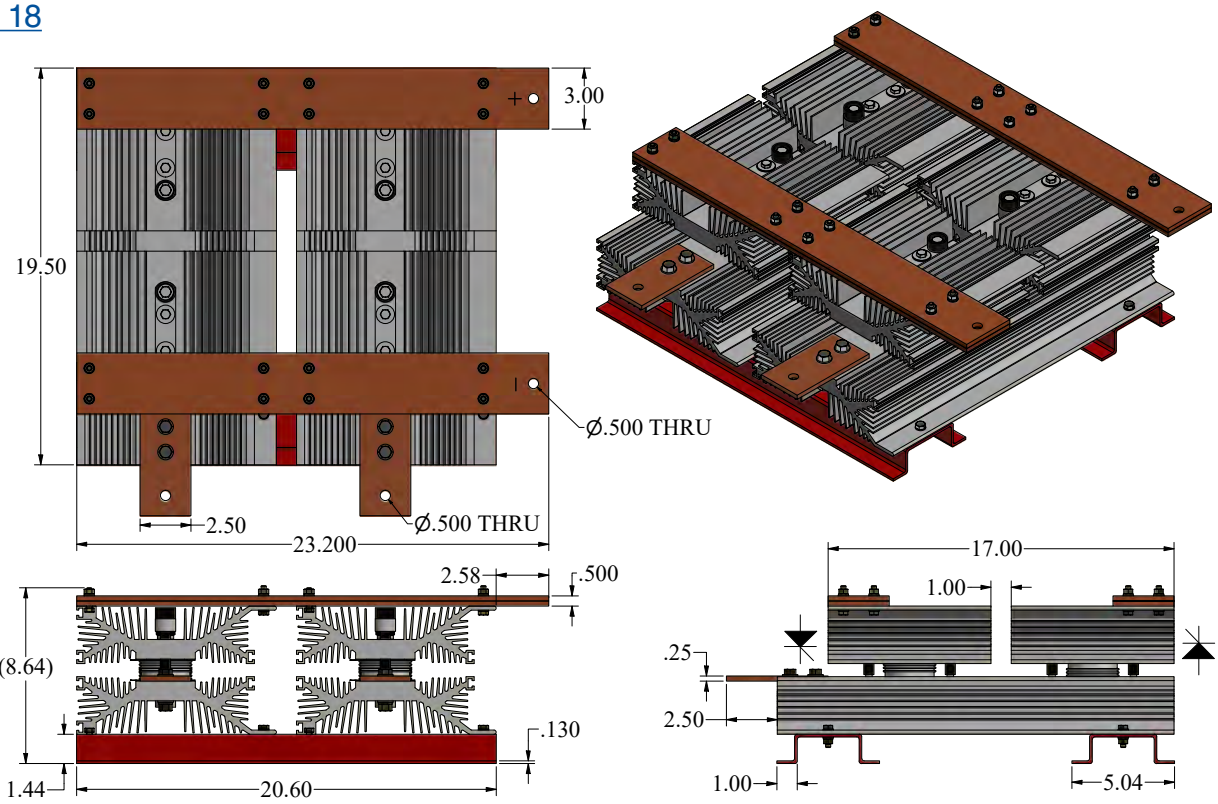
OUTLINE 16



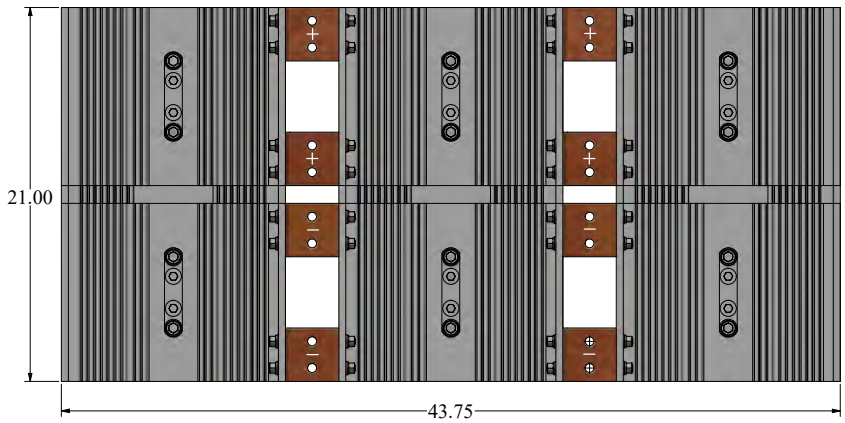
OUTLINE 17

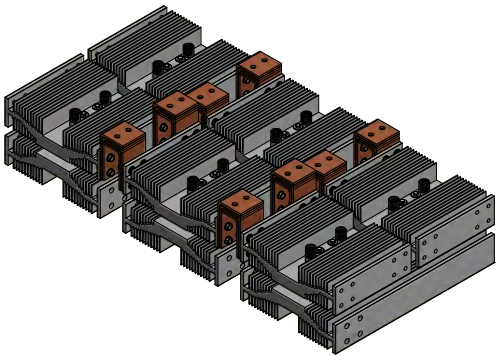


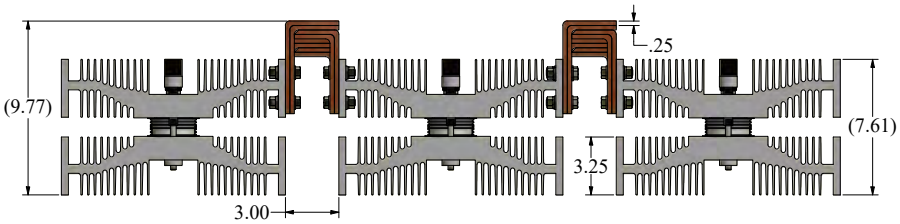
OUTLINE 18

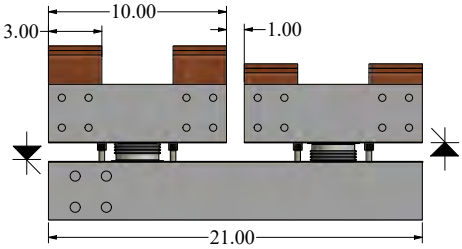


OUTLINE 19

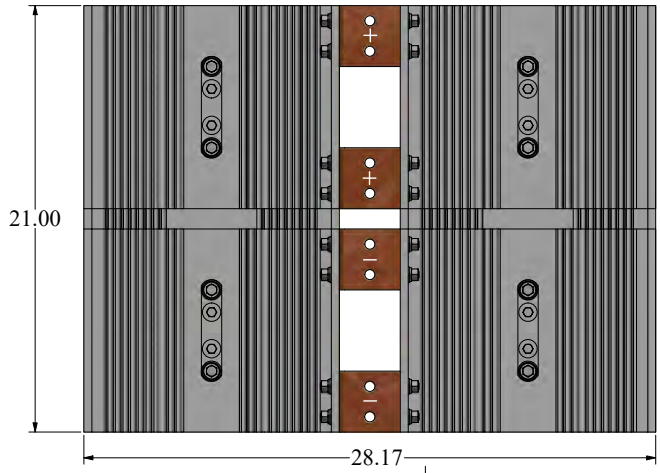


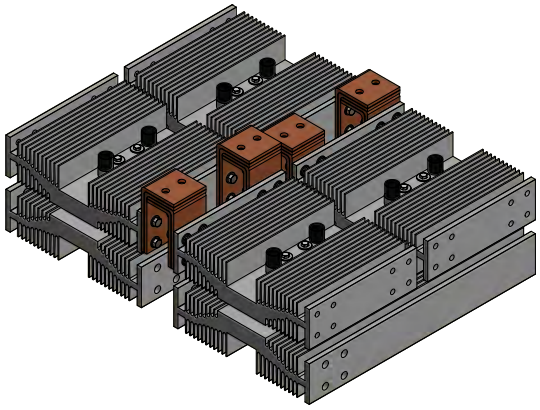


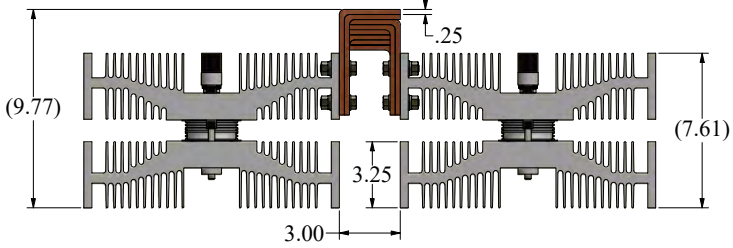


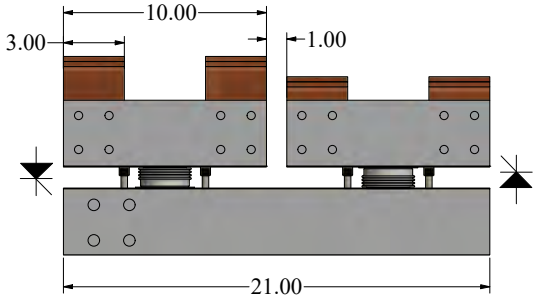


OUTLINE 20

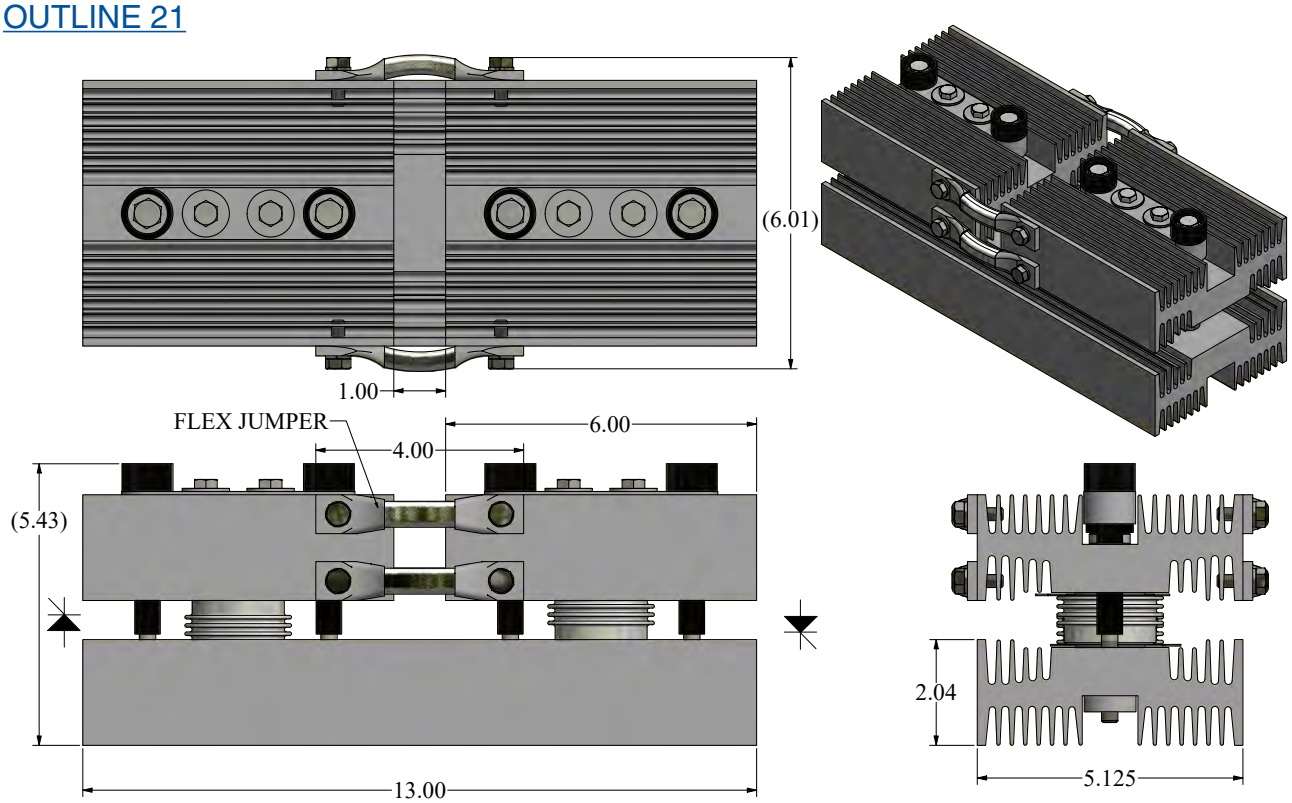




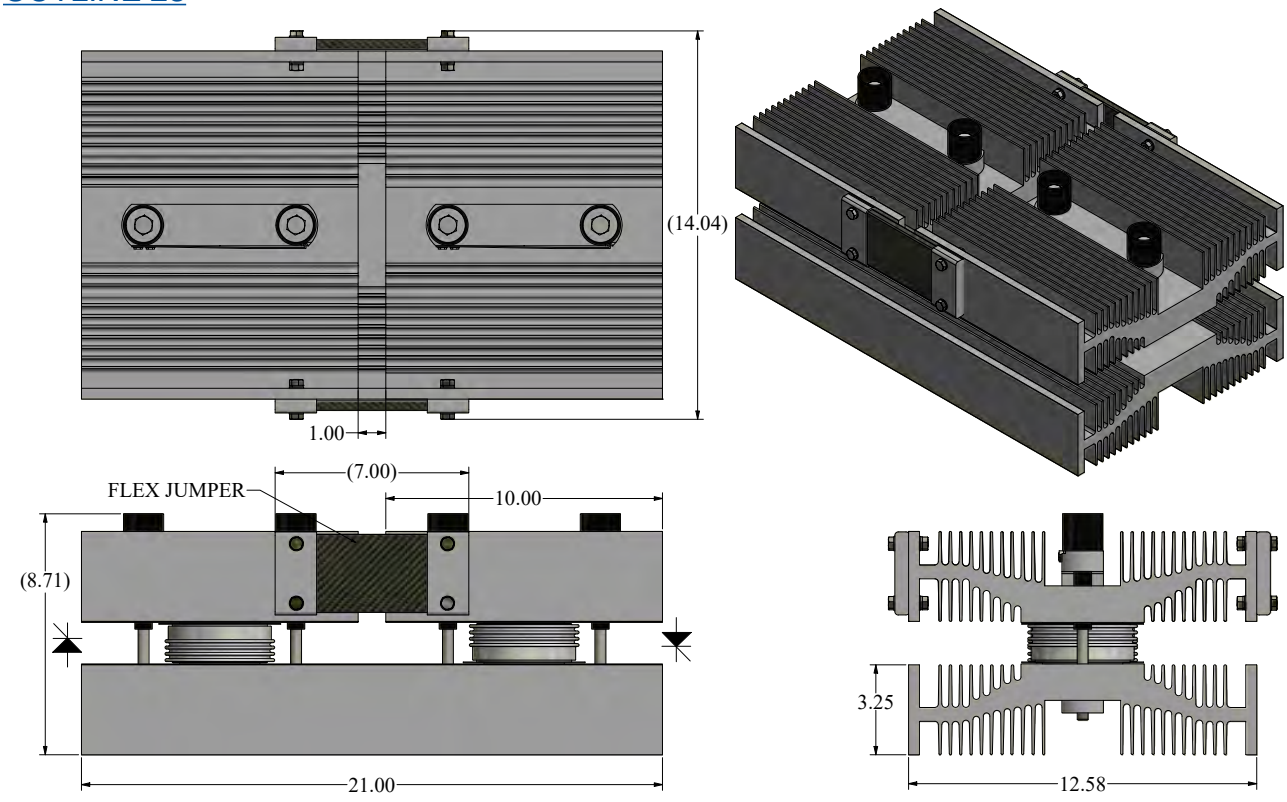




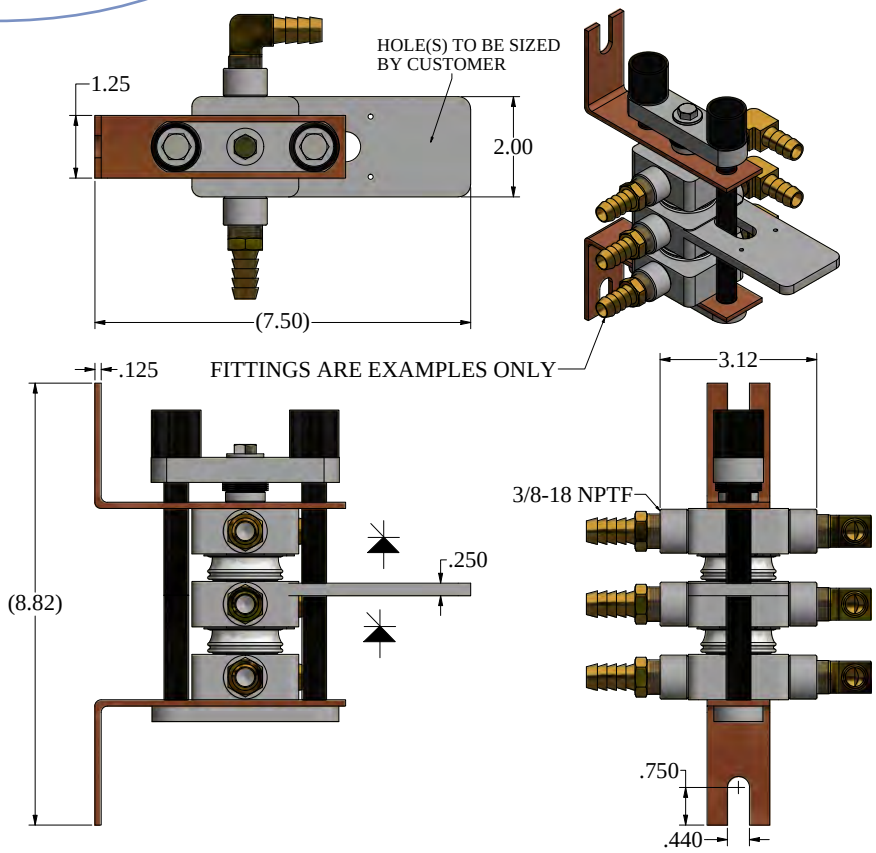
OUTLINE 21



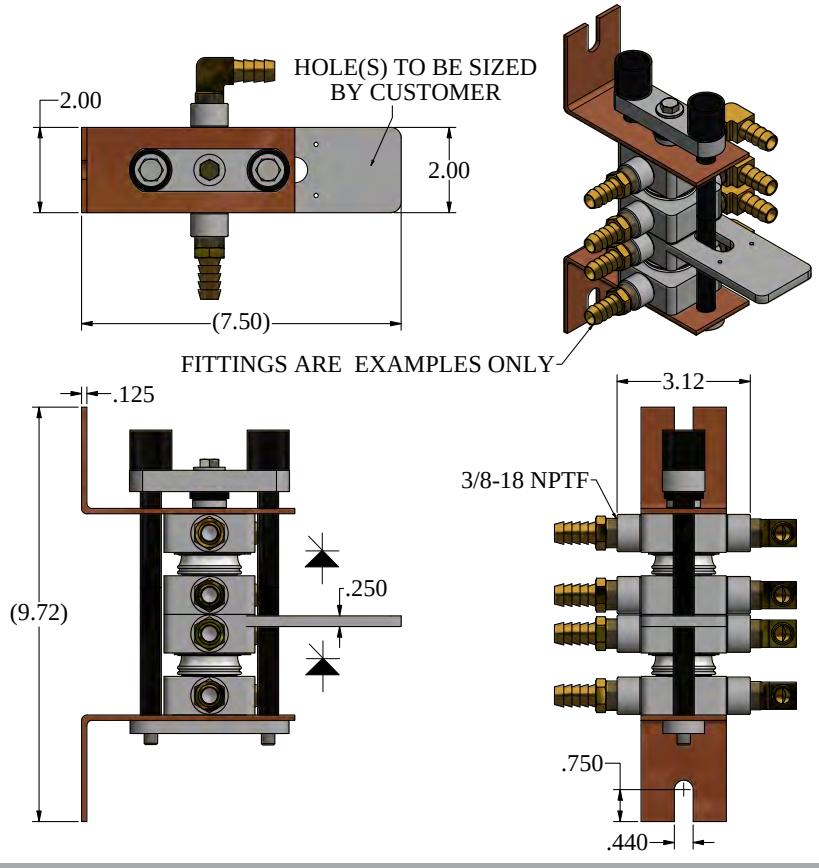
OUTLINE 23



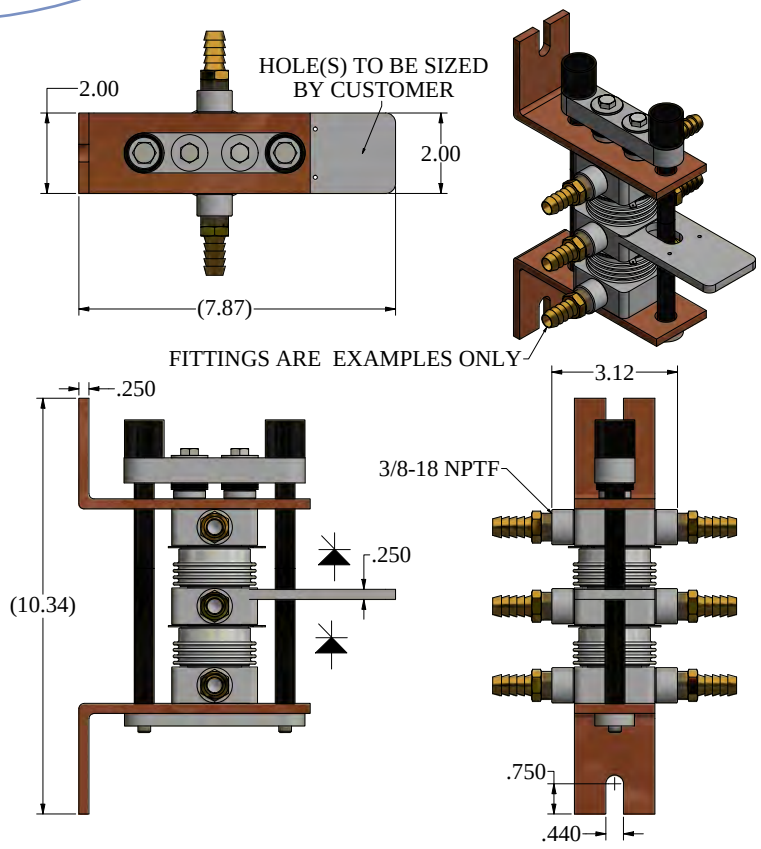
OUTLINE 25



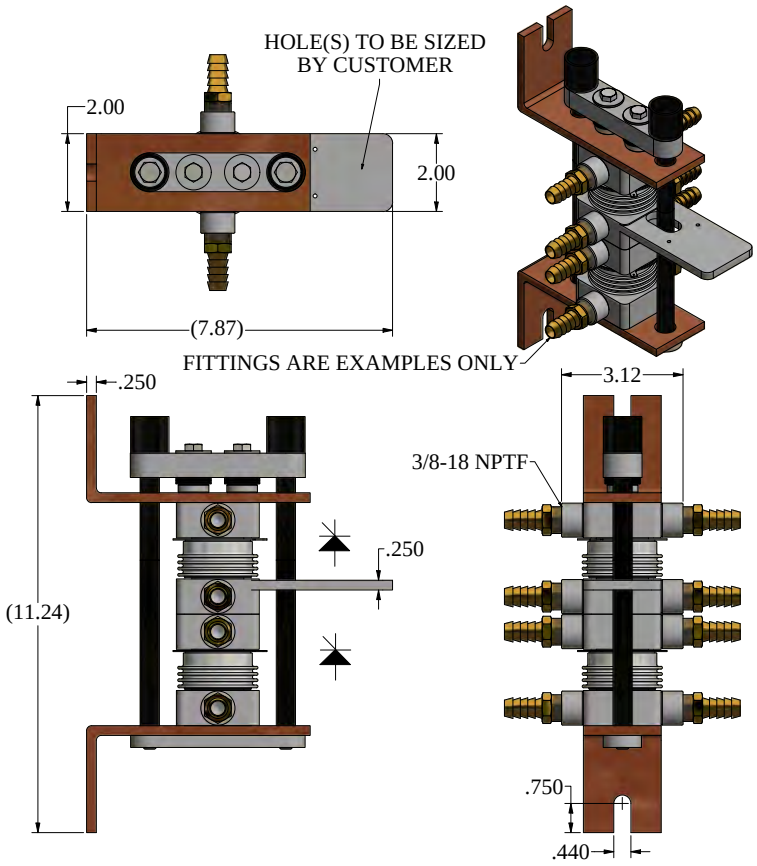
OUTLINE 26



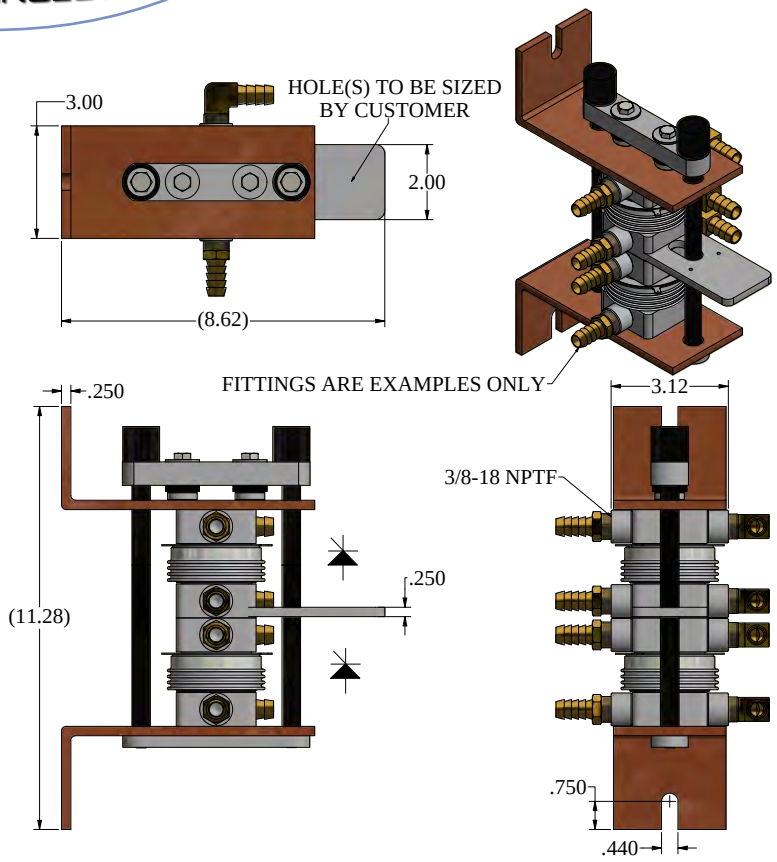
OUTLINE 27



OUTLINE 28



OUTLINE 29



OUTLINE 30

