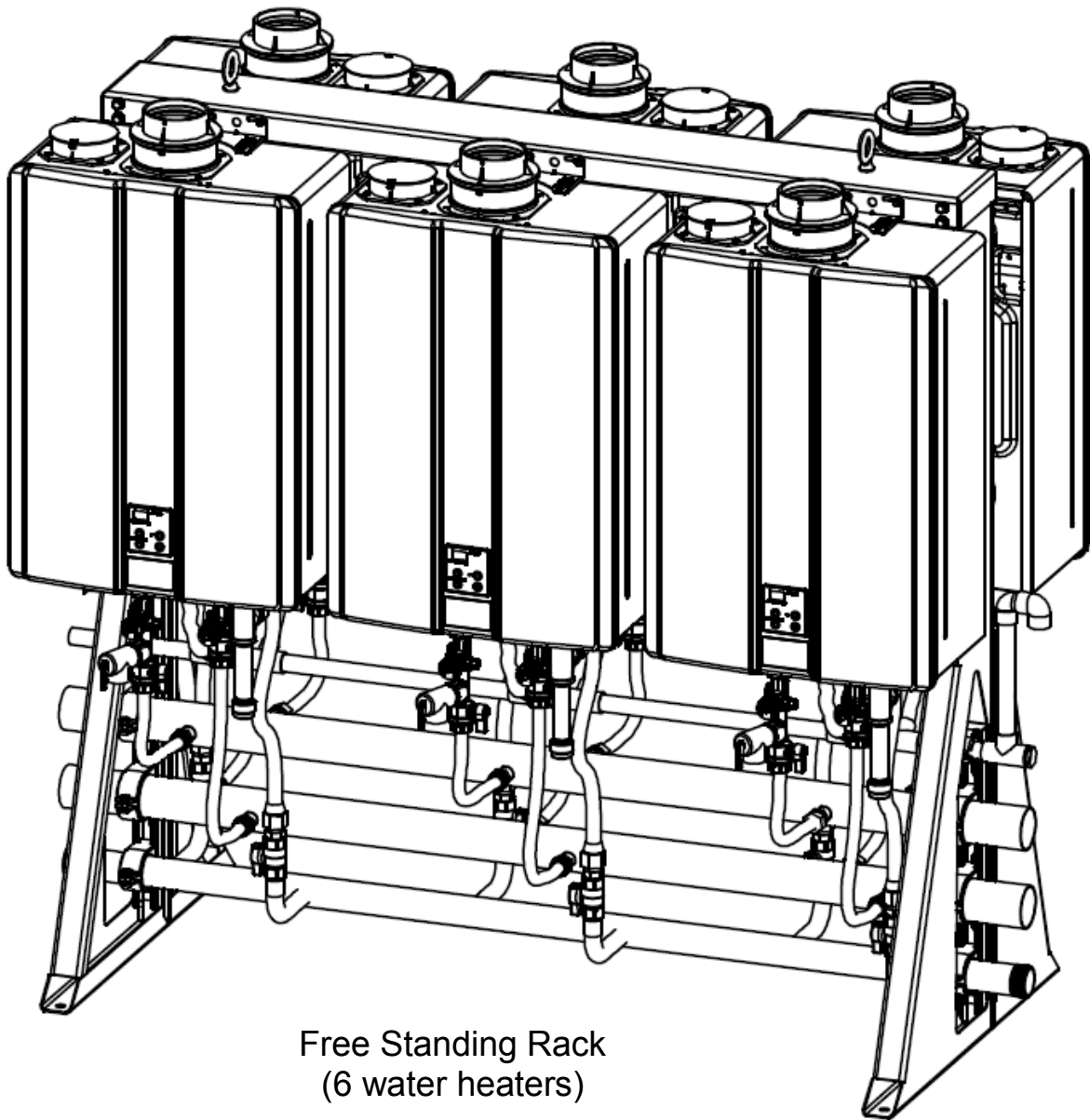


TANKLESS RACK SYSTEM SPECIFICATIONS



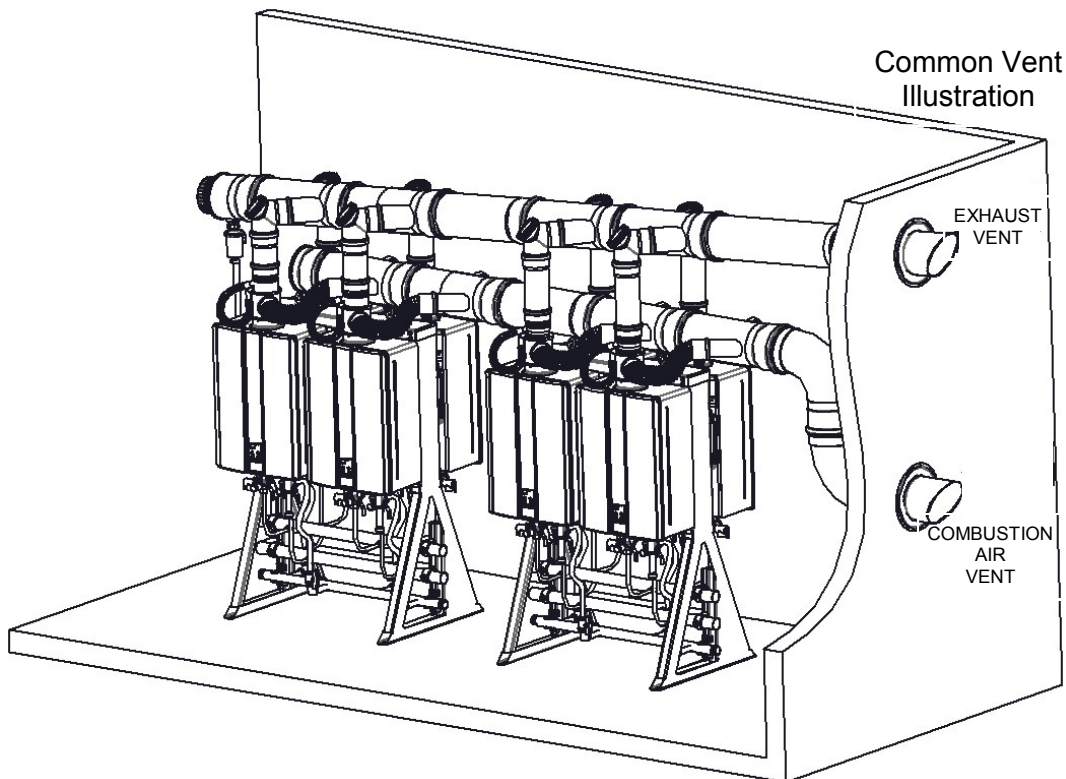
Free Standing Rack
(6 water heaters)

Venting Options

Venting Options	Exhaust Vent Material	Intake Vent Material	Diameter	Max. Units	Max. Vent Length	
					Natural Gas	Propane
Common Venting System	PPTl (CVent) PPS (CVent)	PVC or PPTl	8"	8	100' (with 7 units) or 41' (with 8 units)	
Concentric	PPS	PVC	5"	1	65'	45'
Twin Pipe PVC/CPVC	PVC/CPVC	PVC/CPVC	4"	1	100'	65'
			3"	1	65'	41'
Dual Pipe*	PPs	PPs or PVC	3"	1	41'	41'

* This venting is provided by Centrotherm through their own distribution network

- Refer to the water heater installation and operation manual for specific details regarding vent installation option and installation.
- Venting components are packaged separately from the pre-assembled Rack for field assembly of the vent system by the contractor.



For more information on venting please see tankless water heater installation manual and/or common vent manual.

Tankless Rack WALL HANGING

Part No.*	Rack type	Configuration	Illustration
TRW02iN	2-unit interior wall hanging rack, NG		
TRW02eN	2-unit exterior wall hanging rack, NG		
TRW02iP	2-unit interior wall hanging rack, LP		
TRW02eP	2-unit exterior wall hanging rack, LP		
TRW23iN	2-unit interior wall hanging rack, NG		
TRW23eN	2-unit exterior wall hanging rack, NG		
TRW23iP	2-unit interior wall hanging rack, LP		
TRW23eP	2-unit exterior wall hanging rack, LP		
TRW03iN	3-unit interior wall hanging rack, NG		
TRW03eN	3-unit exterior wall hanging rack, NG		
TRW03iP	3-unit interior wall hanging rack, LP		
TRW03eP	3-unit exterior wall hanging rack, LP		

Tankless Rack WALL HANGING SE SERIES





Part No.*	Rack type	Configuration	Illustration
TRW02SEiN	2-unit interior wall hanging rack, NG RUC		
TRW02SEeN	2-unit exterior wall hanging rack, NG RUC		
TRW02SEiP	2-unit interior wall hanging rack, LP RUC		
TRW02SEeP	2-unit exterior wall hanging rack, LP RUC		

Tankless Rack WALL HANGING SE+ SERIES WITH PUMP

Part No.*	Rack type	Configuration	Illustration
TRW02STiN	2-unit interior wall mount rack, NG		
TRW02STeN	2-unit exterior wall mount rack, NG		
TRW02STiP	2-unit interior wall mount rack, LP		
TRW02STeP	2-unit exterior wall mount rack, LP		
TRW03STiN	2-unit interior wall mount rack, NG		
TRW03STeN	2-unit exterior wall mount rack, NG		
TRW03STiP	2-unit interior wall mount rack, LP		
TRW03STeP	2-unit exterior wall mount rack, LP		

Part no. system: TR = tankless rack; W = wall hanging; S = stand alone; IL = inline; ILW = Inline Wall Mount; 2/3/4/5/6 = no. of water heaters; i/e = interior/exterior; NG/LP = fuel type

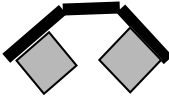
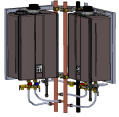
Tankless Rack WALL HANGING HE SERIES

Part No.*	Rack type	Configuration	Illustration
TRW02HEiN	2-unit interior wall mount rack, NG ^[1]		
TRW02HEXiN	2-unit interior wall mount rack, NG ^[2]		
TRW02HEeN	2-unit exterior wall mount rack, NG		
TRW02HEiP	2-unit interior wall mount rack, LP		
TRW02HEeP	2-unit exterior wall mount rack, LP		
TRW03HEiN	3-unit interior wall mount rack, NG ^[1]		
TRW03HEXiN	3-unit interior wall mount rack, NG ^[2]		
TRW03HEeN	3-unit exterior wall mount rack, NG		
TRW03HEiP	3-unit interior wall mount rack, LP		
TRW03HEeP	3-unit exterior wall mount rack, LP		




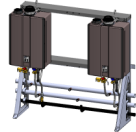

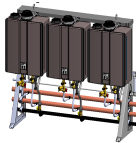
^[1] For use with RL94i Tankless Water Heaters.

^[2] For use with RLX94i Tankless Water Heaters.

Tankless Rack CORNER HANGING

Part No.*	Rack type	Configuration	Illustration
TRC02iN	2-unit interior corner hanging rack, NG		
TRC02iP	2-unit interior corner hanging rack, LP		

Tankless Rack INLINE WALL MOUNT

Part No.*	Rack type	Configuration	Illustration
TRS02iLWiN	2-unit interior wall mount rack, NG		
TRS02iLWeN	2-unit exterior wall mount rack, NG		
TRS02iLWiP	2-unit interior wall mount rack, LP		
TRS02iLWeP	2-unit exterior wall mount rack, LP		
TRS23iLWiN	2-unit interior wall mount rack, NG		
TRS23iLWeN	2-unit exterior wall mount rack, NG		
TRS23iLWiP	2-unit interior wall mount rack, LP		
TRS23iLWeP	2-unit exterior wall mount rack, LP		
TRS03iLWiN	3-unit interior wall mount rack, NG		
TRS03iLWeN	3-unit exterior wall mount rack, NG		
TRS03iLWiP	3-unit interior wall mount rack, LP		
TRS03iLWeP	3-unit exterior wall mount rack, LP		

Part no. system: TR = tankless rack; W = wall hanging; S = stand alone; IL = inline; ILW = Inline Wall Mount; 2/3/4/5/6 = no. of water heaters; i/e = interior/exterior; NG/LP = fuel type

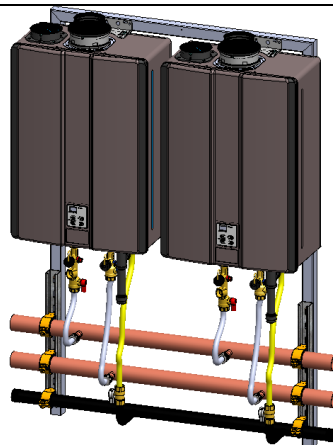
Tankless Rack FREESTANDING

Part No.*	Rack type	Configuration	Illustration
TRS02iN	2-unit interior free standing rack, NG	Back to Back 	
TRS02eN	2-unit exterior free standing rack, NG		
TRS02iP	2-unit interior free standing rack, LP		
TRS02eP	2-unit exterior free standing rack, LP		
TRS02ILiN	2-unit INLINE interior free standing rack, NG		
TRS02ILeN	2-unit INLINE exterior free standing rack, NG		
TRS02ILiP	2-unit INLINE interior free standing rack, LP		
TRS02ILeP	2-unit INLINE exterior free standing rack, LP		
TRS23ILiN	2-unit INLINE interior free standing rack, NG		
TRS23ILeN	2-unit INLINE exterior free standing rack, NG		
TRS23ILiP	2-unit INLINE interior free standing rack, LP		
TRS23ILeP	2-unit INLINE exterior free standing rack, LP		
TRS03ILiN	3-unit INLINE interior free standing rack, NG		
TRS03ILeN	3-unit INLINE exterior free standing rack, NG		
TRS03ILiP	3-unit INLINE interior free standing rack, LP		
TRS03ILeP	3-unit INLINE exterior free standing rack, LP		
TRS03iN	3-unit interior free standing rack, NG		
TRS03eN	3-unit exterior free standing rack, NG		
TRS03iP	3-unit interior free standing rack, LP		
TRS03eP	3-unit exterior free standing rack, LP		
TRS36iN	3-unit interior free standing rack, NG		
TRS36eN	3-unit exterior free standing rack, NG		
TRS36iP	3-unit interior free standing rack, LP		
TRS36eP	3-unit exterior free standing rack, LP		
TRS04iN	4-unit interior free standing rack, NG		
TRS04eN	4-unit exterior free standing rack, NG		
TRS04iP	4-unit interior free standing rack, LP		
TRS04eP	4-unit exterior free standing rack, LP		
TRS46iN	4-unit interior free standing rack, NG		
TRS46eN	4-unit exterior free standing rack, NG		
TRS46iP	4-unit interior free standing rack, LP		
TRS46eP	4-unit exterior free standing rack, LP		
TRS05iN	5-unit interior free standing rack, NG		
TRS05eN	5-unit exterior free standing rack, NG		
TRS05iP	5-unit interior free standing rack, LP		
TRS05eP	5-unit exterior free standing rack, LP		
TRS06iN	6-unit interior free standing rack, NG		
TRS06eN	6-unit exterior free standing rack, NG		
TRS06iP	6-unit interior free standing rack, LP		
TRS06eP	6-unit exterior free standing rack, LP		

Part no. system: TR = tankless rack; W = wall hanging; S = stand alone; IL = inline; ILW = Inline Wall Mount; 2/3/4/5/6 = no. of water heaters; i/e = interior/exterior; NG/LP = fuel type

2 UNIT WALL HANGING FRAME

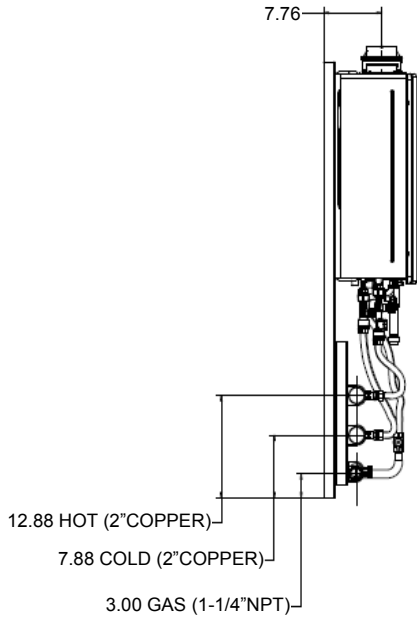
Model	TRW02i	TRW02e
Water Heater Model	C199i (NG/LP)	C199e (NG/LP)
Crate Dimensions (HxLxD) - in	66 x 67 x 35	
Weight - Fully Assembled - lbs	166	165
Weight - Shipping (total) - lbs	380	379
Rack Frame - Specifications		
Frame Material	14 Gauge Hot Rolled Steel 1.5" Square Tube	16 Gauge Stainless Steel 1.5" Square Tube
Frame Finish	Powder Coat	Stainless
Color	Gray	Stainless
Water & Gas Connections		
Hot Water Trunk Line Diameter	2"	
Cold Water Trunk Line Diameter	2"	
Hot Water Trunk Line Material	Rigid Copper	
Cold Water Trunk Line Material	Rigid Copper	
Water Trunk Connection Type	2" PIPE	
Gas Trunk Line Diameter	1-1/4"	
Gas Trunk Connection Type	1-1/4" MNPT	
Gas Trunk Line Material	Sch 40 Steel	
Gas Branch Line Material	PVC Over CSST	
Electric Requirements		
Voltage	AC 120 Volts—60 Hz	
Maximum Current (Amperes)	8	
BTU and Flow Rates for C199i, C199e (NG/LP)		
Number of Tankless Water Heaters	2	
Flow rate @ 70°F rise (gpm)	10.8	
Flow rate @ 100°F rise (gpm)	7.6	
Minimum input rate (Btuh)	15,200	
Maximum input rate (Btuh)	398,000	



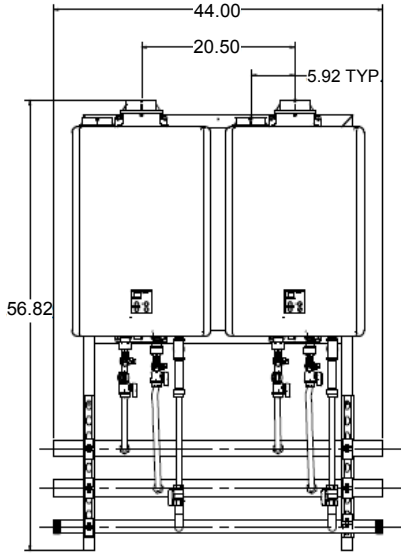
TRW02

2 UNIT WALL HANGING FRAME

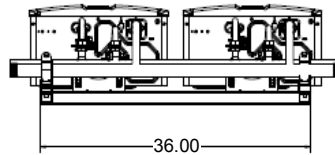
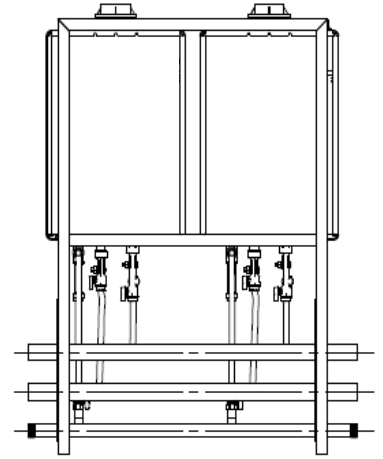
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FRONT



BACK

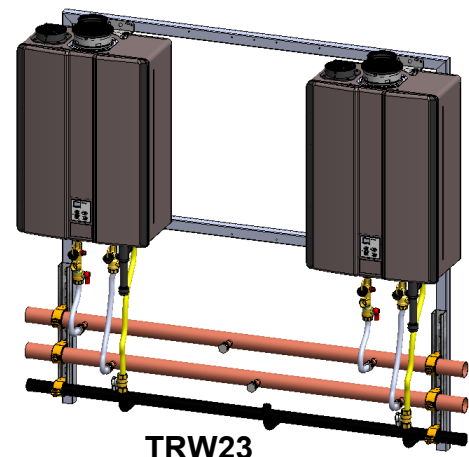
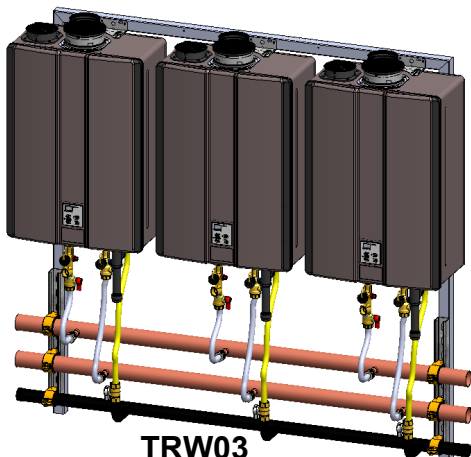


BOTTOM

Model	Configuration	Illustration
TRW02		

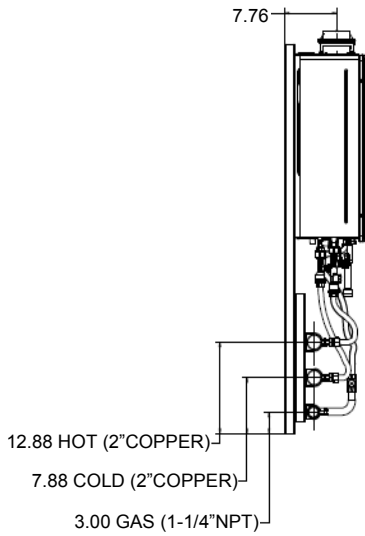
3 UNIT WALL HANGING FRAME

Model	TRW03i	TRW03e	TRW23i	TRW23e
Water Heater Model	C199i (NG/LP)	C199e (NG/LP)	C199i (NG/LP)	C199e (NG/LP)
Crate Dimensions (HxLxD) - in	66 x 67 x 35		66 x 67 x 35	
Weight - Fully Assembled - lbs	244	240	182	179
Weight - Shipping (total) - lbs	458	454	396	393
Rack Frame - Specifications				
Frame Material	14 Gauge Hot Rolled Steel 1.5" Square Tube	16 Gauge Stainless Steel 1.5" Square Tube	14 Gauge Hot Rolled Steel 1.5" Square Tube	16 Gauge Stainless Steel 1.5" Square
Frame Finish	Powder Coat	Stainless	Powder Coat	Stainless
Color	Gray	Stainless	Gray	Stainless
Water & Gas Connections				
Hot Water Trunk Line Diameter	2"			
Cold Water Trunk Line Diameter	2"			
Hot Water Trunk Line Material	Rigid Copper			
Cold Water Trunk Line Material	Rigid Copper			
Water Trunk Connection Type	2" PIPE			
Gas Trunk Line Diameter	1-1/4"			
Gas Trunk Connection Type	1-1/4" MNPT			
Gas Trunk Line Material	Sch 40 Steel			
Gas Branch Line Material	PVC Over CSST			
Electric Requirements				
Voltage	AC 120 Volts—60 Hz			
Maximum Current (Amperes)	12		8	
BTU and Flow Rates for C199i, C199e (NG/LP)				
Number of Tankless Water Heaters	3		2	
Flow rate @ 70°F rise (gpm)	16.2		10.8	
Flow rate @ 100°F rise (gpm)	11.4		7.6	
Minimum input rate (Btuh)	15,200		15,200	
Maximum input rate (Btuh)	597,000		398,000	

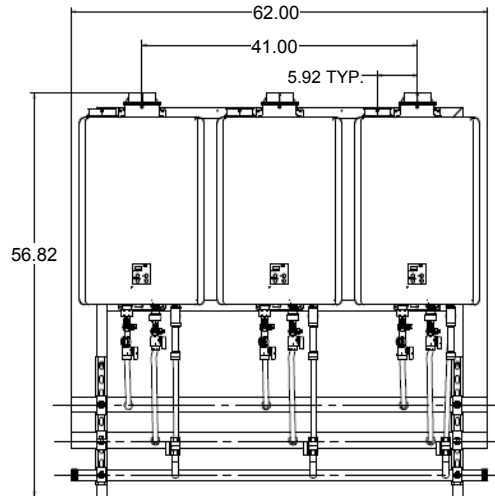


3 UNIT WALL HANGING FRAME

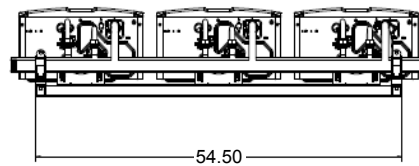
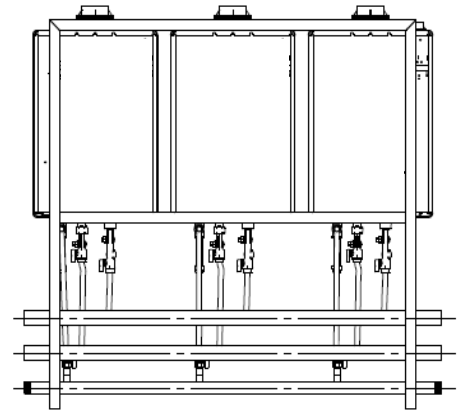
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FRONT



BACK

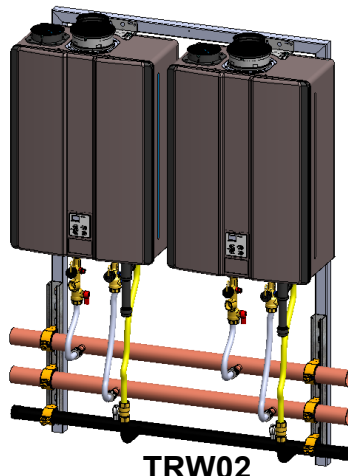


BOTTOM

Model	Configuration	Illustration
TRW03		
TRW23		

2 UNIT WALL HANGING FRAME SE SERIES

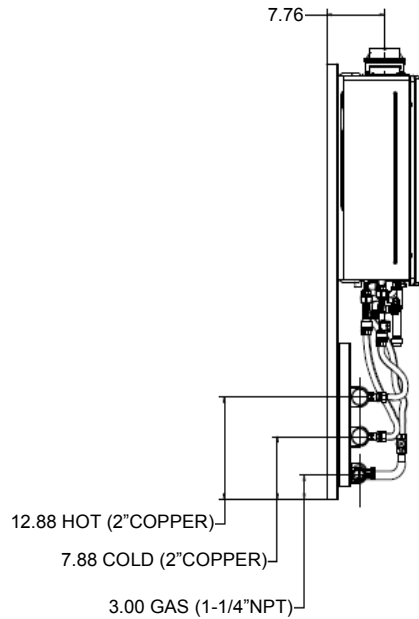
Model	TRW02SEi	TRW02SEe
Water Heater Model	RUC98i (NG/LP)	RU98e (NG/LP)
Crate Dimensions (HxLxD) - in	66 X 67 X 35	
Weight - Fully Assembled - lbs	166	165
Weight - Shipping (total) - lbs	380	379
Rack Frame - Specifications		
Frame Material	14 Gauge Hot Rolled Steel 1.5" Square Tube	16 Gauge Stainless Steel 1.5" Square Tube
Frame Finish	Powder Coat	Stainless
Color	Gray	Stainless
Water & Gas Connections		
Hot Water Trunk Line Diameter	2"	
Cold Water Trunk Line Diameter	2"	
Hot Water Trunk Line Material	Rigid Copper	
Cold Water Trunk Line Material	Rigid Copper	
Water Trunk Connection Type	2" PIPE	
Gas Trunk Line Diameter	1-1/4"	
Gas Trunk Connection Type	1-1/4" MNPT	
Gas Trunk Line Material	Sch 40 Steel	
Gas Branch Line Material	PVC Over CSST	
Electric Requirements		
Voltage	AC 120 Volts—60 Hz	
Maximum Current (Amperes)	8	
BTU and Flow Rates for RUC98i, RU98e (NG/LP)		
Number of Tankless Water Heaters	2	
Flow rate @ 70°F rise (gpm)	10.8	
Flow rate @ 100°F rise (gpm)	7.6	
Minimum input rate (Btuh)	15,200	
Maximum input rate (Btuh)	398,000	



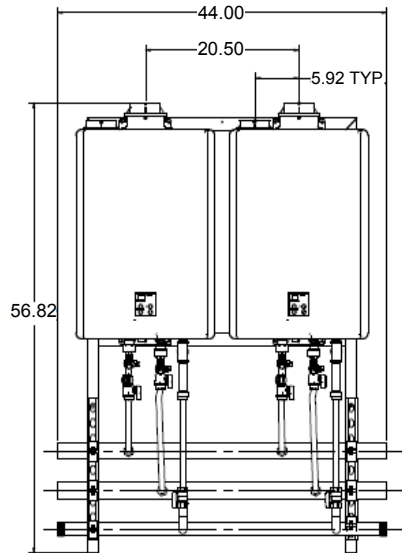
TRW02

2 UNIT WALL HANGING FRAME SE SERIES

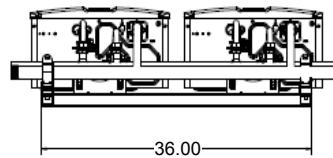
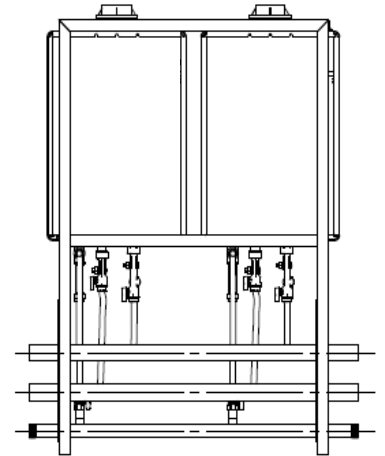
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BACK

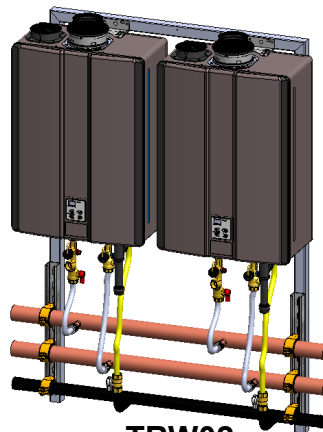


BOTTOM

Model	Configuration	Illustration
TRW02SE		

2 UNIT WALL HANGING FRAME SE + WITH PUMP

Model	TRW02STi	TRW02STe
Water Heater Model	RUR98i AND RUC98i (NG/LP)	RUR98e AND RU98e (NG/LP)
Crate Dimensions (HxLxD) - in	66 X 67 X 35	
Weight - Fully Assembled - lbs	174	173
Weight - Shipping (total) - lbs	388	387
Rack Frame - Specifications		
Frame Material	14 Gauge Hot Rolled Steel 1.5" Square Tube	16 Gauge Stainless Steel 1.5" Square Tube
Frame Finish	Powder Coat	Stainless
Color	Gray	Stainless
Water & Gas Connections		
Hot Water Trunk Line Diameter	2"	
Cold Water Trunk Line Diameter	2"	
Hot Water Trunk Line Material	Rigid Copper	
Cold Water Trunk Line Material	Rigid Copper	
Water Trunk Connection Type	2" PIPE	
Gas Trunk Line Diameter	1-1/4"	
Gas Trunk Connection Type	1-1/4" MNPT	
Gas Trunk Line Material	Sch 40 Steel	
Gas Branch Line Material	PVC Over CSST	
Electric Requirements		
Voltage	AC 120 Volts—60 Hz	
Maximum Current (Amperes)	8	
BTU and Flow Rates for RUR98i, RUR98e, RUC98i, RU98e (NG/LP)		
Number of Tankless Water Heaters	2	
Flow rate @ 70°F rise (gpm)	10.8	
Flow rate @ 100°F rise (gpm)	7.6	
Minimum input rate (Btuh)	15,200	
Maximum input rate (Btuh)	398,000	



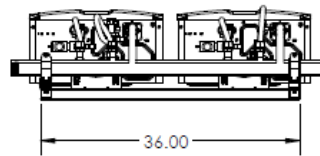
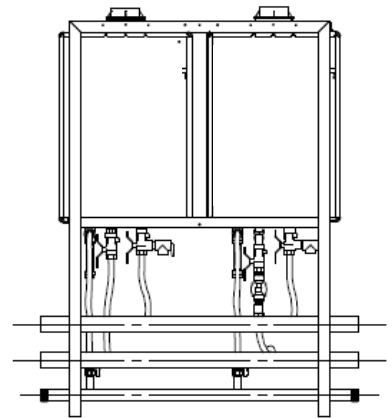
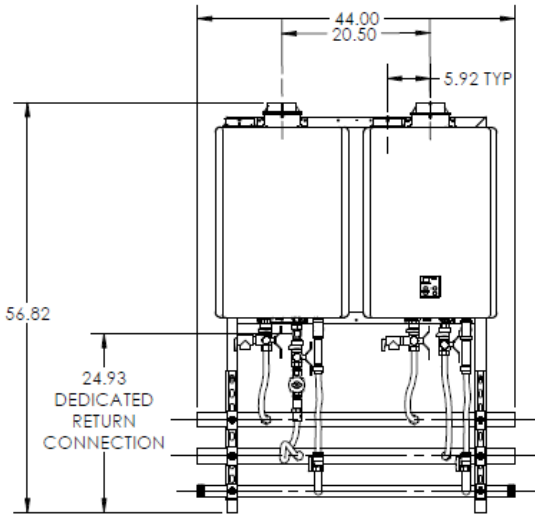
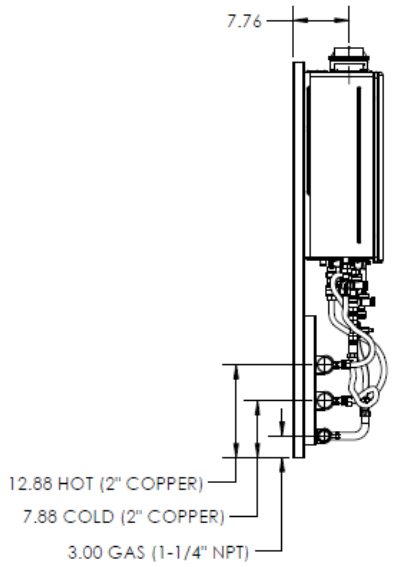
TRW02

2 UNIT WALL HANGING FRAME SE + WITH PUMP



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FRONT

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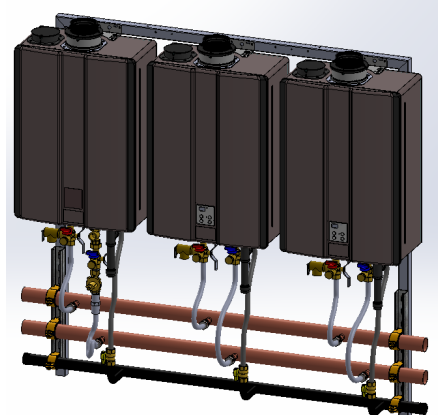


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Model	Configuration	Illustration
TRW02ST		

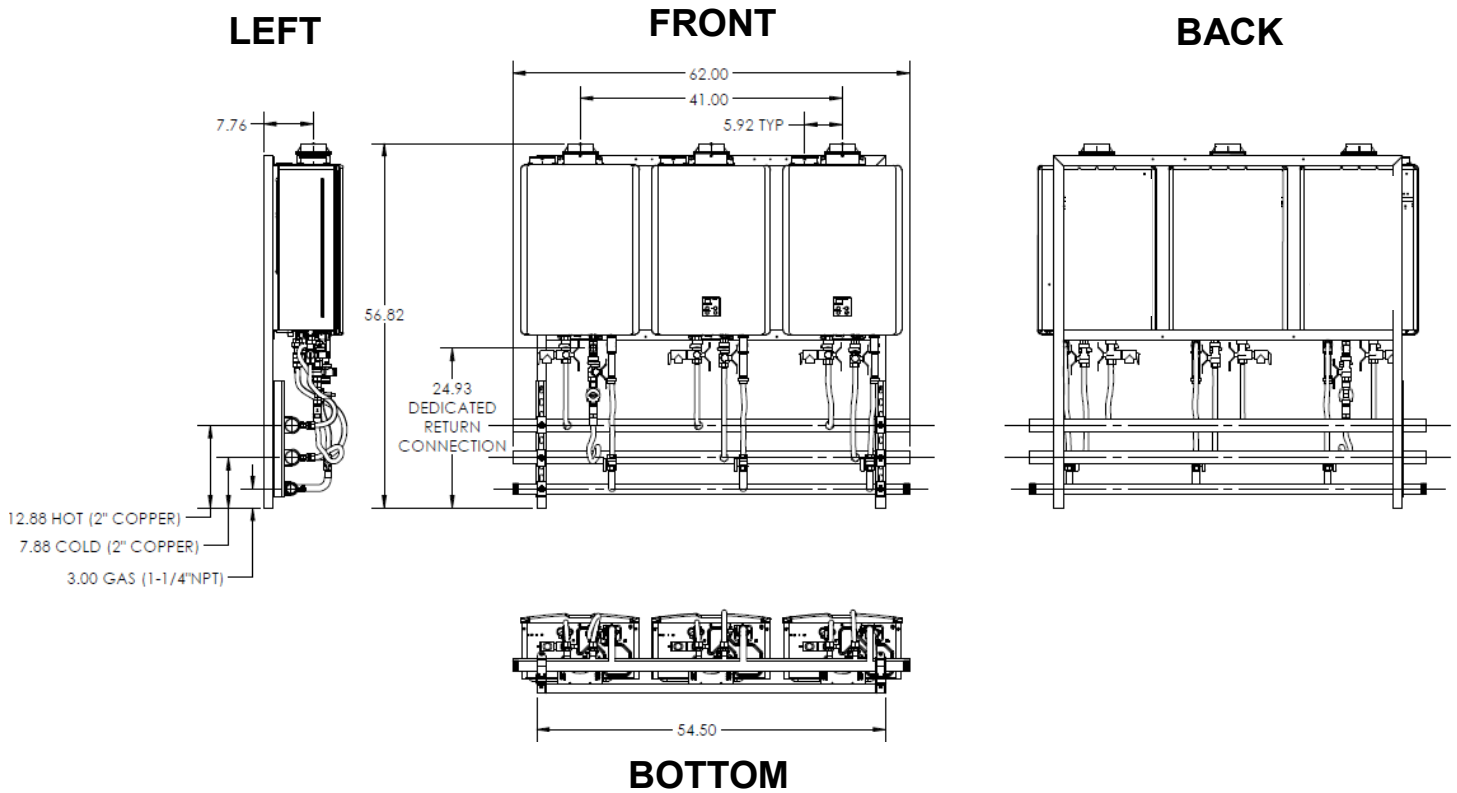
3 UNIT WALL HANGING FRAME SE + WITH PUMP

Model	TRW03STi	TRW03STe
Water Heater Model	RUR98i AND RUC98i (NG/LP)	RUR98e AND RU98e (NG/LP)
Crate Dimensions (HxLxD) - in	66 x 67 x 35	
Weight - Fully Assembled - lbs	252	248
Weight - Shipping (total) - lbs	466	462
Rack Frame - Specifications		
Frame Material	14 Gauge Hot Rolled Steel 1.5" Square Tube	16 Gauge Stainless Steel 1.5" Square Tube
Frame Finish	Powder Coat	Stainless
Color	Gray	Stainless
Water & Gas Connections		
Hot Water Trunk Line Diameter	2"	
Cold Water Trunk Line Diameter	2"	
Hot Water Trunk Line Material	Rigid Copper	
Cold Water Trunk Line Material	Rigid Copper	
Water Trunk Connection Type	2" PIPE	
Gas Trunk Line Diameter	1-1/4"	
Gas Trunk Connection Type	1-1/4" MNPT	
Gas Trunk Line Material	Sch 40 Steel	
Gas Branch Line Material	PVC Over CSST	
Electric Requirements		
Voltage	AC 120 Volts—60 Hz	
Maximum Current (Amperes)	12	
BTU and Flow Rates for RUR98i, RUR98e, RUC98i, RU98e (NG/LP)		
Number of Tankless Water Heaters	3	
Flow rate @ 70°F rise (gpm)	16.2	
Flow rate @ 100°F rise (gpm)	11.4	
Minimum input rate (Btuh)	15,200	
Maximum input rate (Btuh)	597,000	



TRW03

3 UNIT WALL HANGING FRAME SE + WITH PUMP



Model	Configuration	Illustration
TRW03ST		

2 UNIT WALL HANGING FRAME HE SERIES

Model	TRW02HEi	TRW02HEXi	TRW02HEe
Water Heater Model	RL94i (NG/LP)	RLX94i (NG)	RL94e (NG/LP)
Crate Dimensions (HxLxD) - in	66 x 67 x 35		
Weight - Fully Assembled - lbs	120	120	120
Weight - Shipping (total) - lbs	334	334	334

Rack Frame - Specifications

Frame Material	14 Gauge Hot Rolled Steel 1.5" Square Tube	16 Gauge Stainless Steel 1.5" Square Tube
Frame Finish	Powder Coat	Stainless
Color	Gray	Stainless

Water & Gas Connections

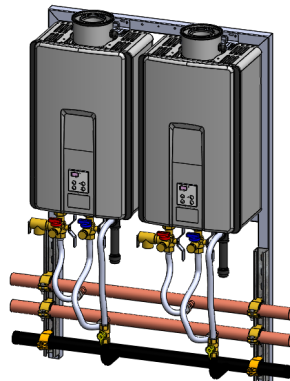
Hot Water Trunk Line Diameter	1-1/2"
Cold Water Trunk Line Diameter	1-1/2"
Hot Water Trunk Line Material	Rigid Copper
Cold Water Trunk Line Material	Rigid Copper
Water Trunk Connection Type	1-1/2" PIPE
Gas Trunk Line Diameter	1-1/4"
Gas Trunk Connection Type	1-1/4" MNPT
Gas Trunk Line Material	Sch 40 Steel
Gas Branch Line Material	PVC Over CSST

Electric Requirements

Voltage	AC 120 Volts—60 Hz
Maximum Current (Amperes)	8

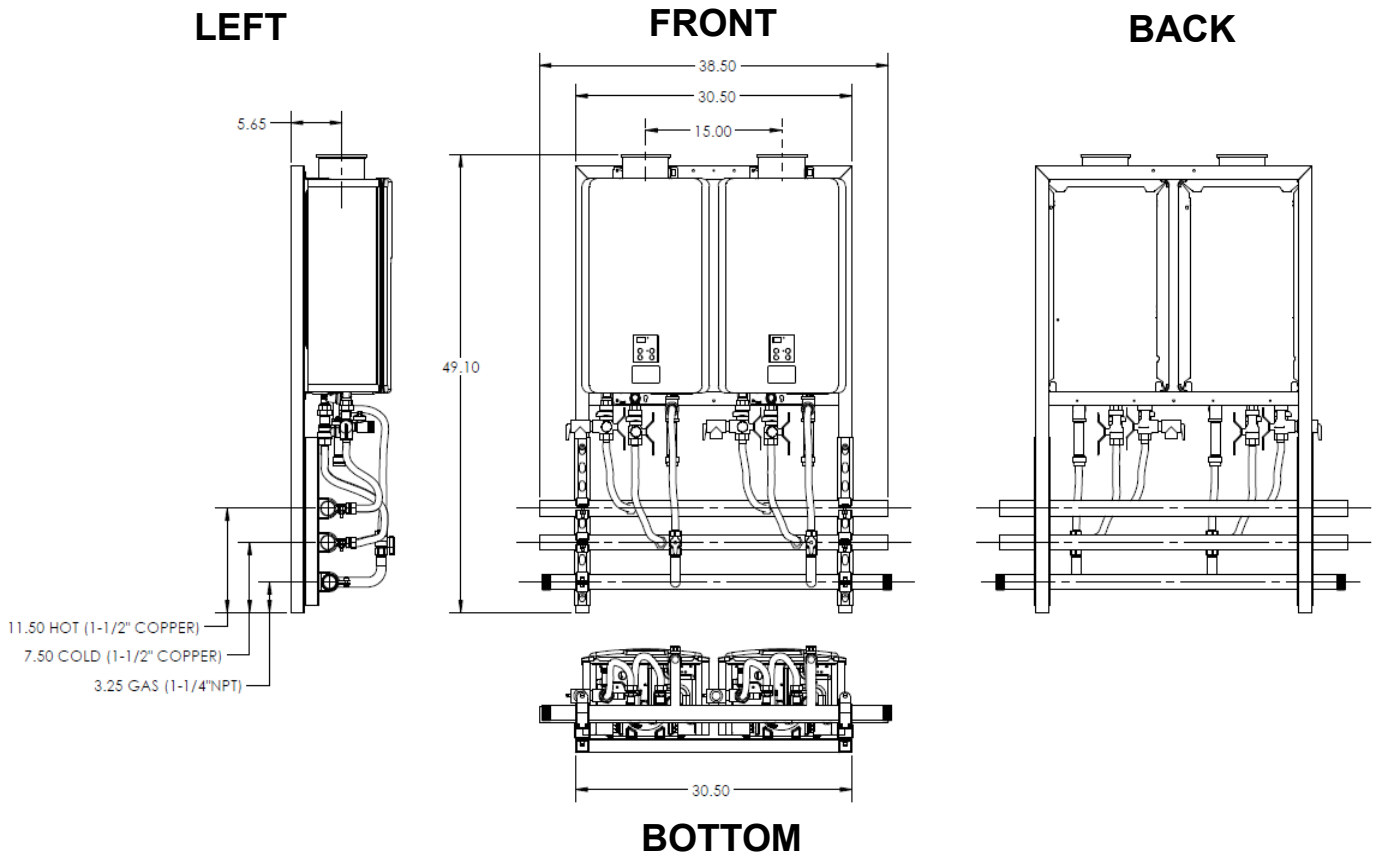
BTU and Flow Rates for RL94i, RLX94i, RL94e (NG/LP)



Number of Tankless Water Heaters	2	2	2
Flow rate @ 70°F rise (gpm)	9.5	9	9.5
Flow rate @ 100°F rise (gpm)	6.6	6.3	6.6
Minimum input rate (Btuh)	10,300	10,300	10,300
Maximum input rate (Btuh)	398,000	384,000	398,000



TRW02HE / TRW02HEX

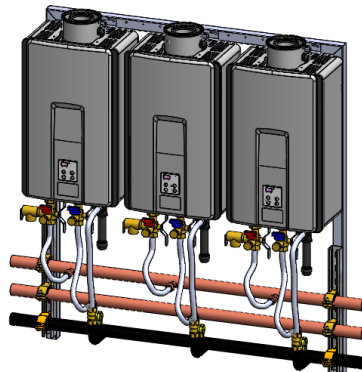
2 UNIT WALL HANGING FRAME HE SERIES



Model	Configuration	Illustration
TRW02HE		

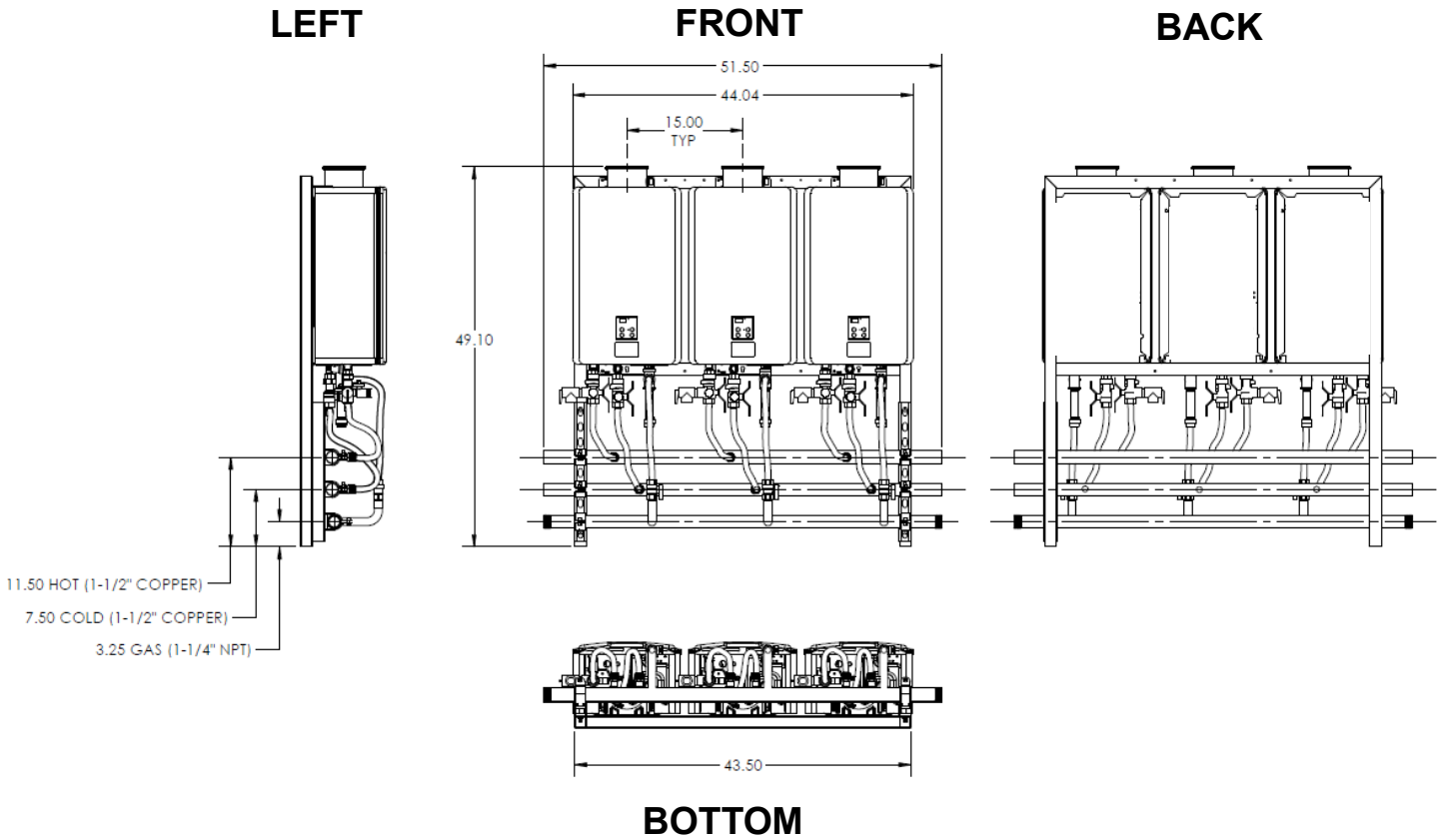
3 UNIT WALL HANGING FRAME HE SERIES

Model	TRW03HEi	TRW03HEXi	TRW03HEe
Water Heater Model	RL94i (NG/LP)	RLX94i (NG)	RL94e (NG/LP)
Crate Dimensions (HxLxD) - in	66 x 67 x 35		
Weight - Fully Assembled - lbs	160	160	160
Weight - Shipping (total) - lbs	374	374	374
Rack Frame - Specifications			
Frame Material	14 Gauge Hot Rolled Steel 1.5" Square Tube		16 Gauge Stainless Steel 1.5" Square Tube
Frame Finish	Powder Coat		Stainless
Color	Gray		Stainless
Water & Gas Connections			
Hot Water Trunk Line Diameter	1-1/2"		
Cold Water Trunk Line Diameter	1-1/2"		
Hot Water Trunk Line Material	Rigid Copper		
Cold Water Trunk Line Material	Rigid Copper		
Water Trunk Connection Type	1-1/2" PIPE		
Gas Trunk Line Diameter	1-1/4"		
Gas Trunk Connection Type	1-1/4" MNPT		
Gas Trunk Line Material	Sch 40 Steel		
Gas Branch Line Material	PVC Over CSST		
Electric Requirements			
Voltage	AC 120 Volts—60 Hz		
Maximum Current (Amperes)	12		
BTU and Flow Rates for RL94i, RLX94i, RL94e (NG/LP)			
Number of Tankless Water Heaters	3	3	3
Flow rate @ 70°F rise (gpm)	14	13.5	14
Flow rate @ 100°F rise (gpm)	9.8	9.4	9.8
Minimum input rate (Btuh)	10,300	10,300	10,300
Maximum input rate (Btuh)	597,000	576,000	597,000



TRW03HE / TRW03HEX

3 UNIT WALL HANGING FRAME HE SERIES



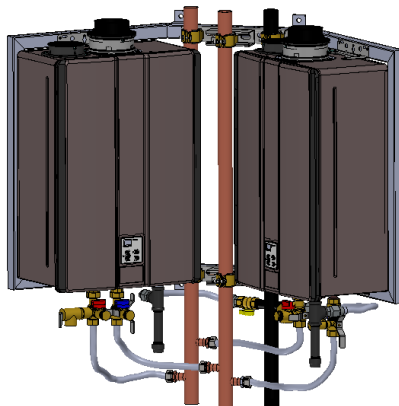
Model	Configuration	Illustration
TRW03HE		

2 UNIT CORNER HANGING FRAME

Model	TRC02i
Water Heater Model	C199i (NG/LP)
Crate Dimensions (HxLxD) - in	31.5 x 48 x 50
Weight - Fully Assembled - lbs	220
Weight - Shipping (total) - lbs	350
Rack Frame - Specifications	
Frame Material	14 Gauge Hot Rolled Steel 1.5" Square Tube
Frame Finish	Powder Coat
Color	Gray
Water & Gas Connections	
Hot Water Trunk Line Diameter	1-1/2"
Cold Water Trunk Line Diameter	1-1/2"
Hot Water Trunk Line Material	Rigid Copper
Cold Water Trunk Line Material	Rigid Copper
Water Trunk Connection Type	1-1/2" PIPE
Gas Trunk Line Diameter	1-1/4"
Gas Trunk Connection Type	1-1/4" MNPT
Gas Trunk Line Material	Sch 40 Steel
Gas Branch Line Material	PVC Over CSST
Electric Requirements	
Voltage	AC 120 Volts—60 Hz
Maximum Current (Amperes)	8

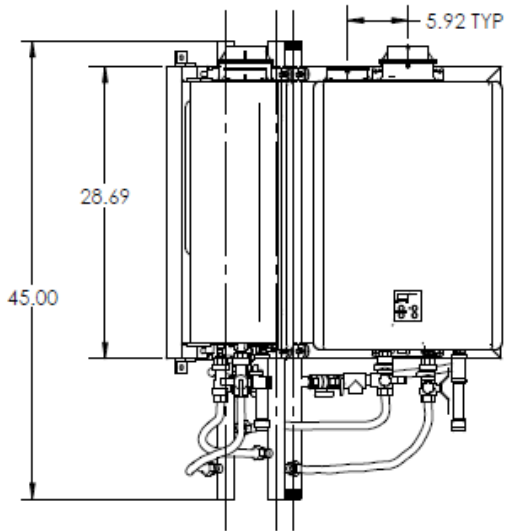
BTU and Flow Rates for C199i, (NG/LP)

Number of Tankless Water Heaters	2
Flow rate @ 70°F rise (gpm)	10.8
Flow rate @ 100°F rise (gpm)	7.6
Minimum input rate (Btuh)	15,200
Maximum input rate (Btuh)	398,000

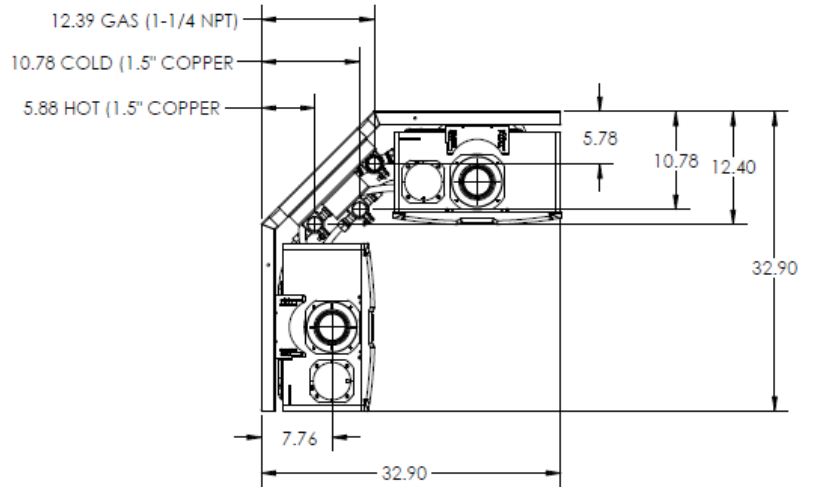


2 UNIT CORNER HANGING FRAME

FRONT



TOP



Model	Configuration	Illustration
TRC02		

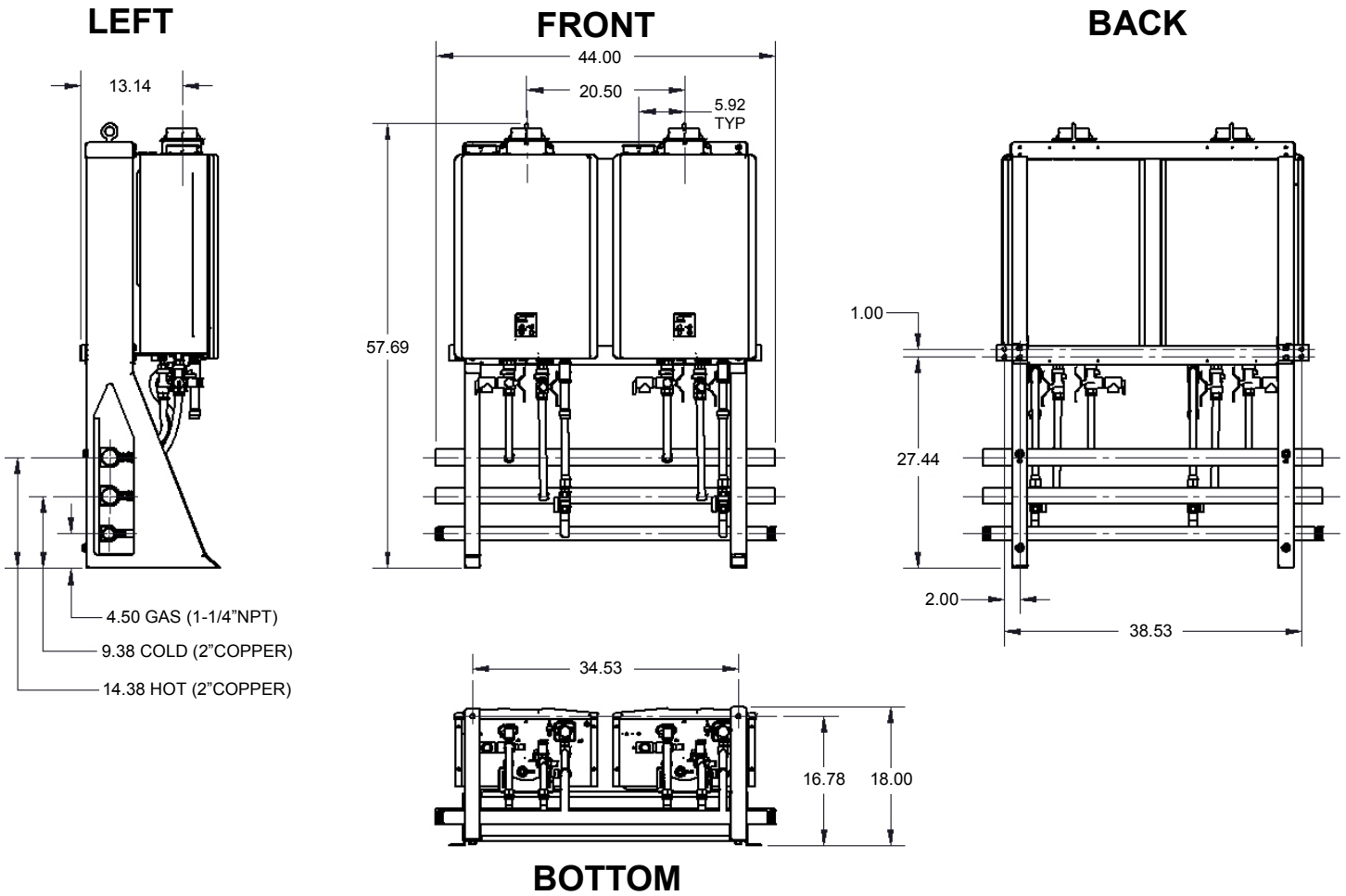
2 UNIT WALL MOUNT FRAME

Model	TRS02ILW
Water Heater Model	C199i, C199e (NG/LP)
Crate Dimensions (HxLxD) - in	66 x 67x 35
Weight - Fully Assembled - lbs	204
Weight - Shipping (total) - lbs	400
Rack Frame - Specifications	
Frame Rail Type	Sheet Metal
Frame Material	Aluminum (0.090 5052-H32)
Frame Finish	Powder Coat
Color	Gray
Water & Gas Connections	
Hot Water Trunk Line Diameter	2"
Cold Water Trunk Line Diameter	2"
Hot Water Trunk Line Material	Rigid Copper
Cold Water Trunk Line Material	Rigid Copper
Water Trunk Connection Type	2" PIPE
Gas Trunk Line Diameter	1-1/4"
Gas Trunk Connection Type	1-1/4" MNPT
Gas Trunk Line Material	Sch 40 Steel
Gas Branch Line Material	PVC Over CSST
Electric Requirements	
Voltage	AC 120 Volts—60 Hz
Maximum Current (Amperes)	8
BTU and Flow Rates for C199i, C199e (NG/LP)	
Number of Tankless Water Heaters	2
Flow rate @ 70°F rise (gpm)	10.8
Flow rate @ 100°F rise (gpm)	7.6
Minimum input rate (Btuh)	15,200
Maximum input rate (Btuh)	398,000



TRS02ILW

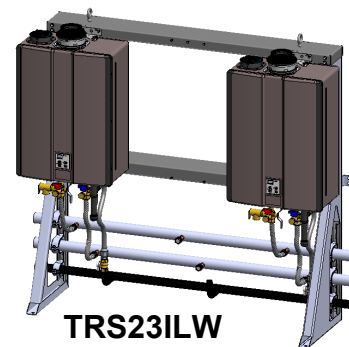
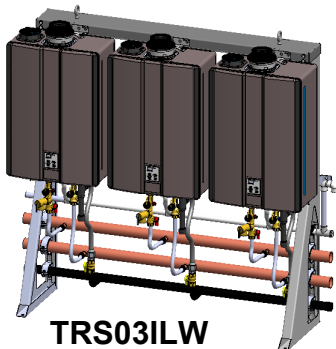
2 UNIT WALL MOUNT FRAME



Model	Configuration	Illustration
TRW02		

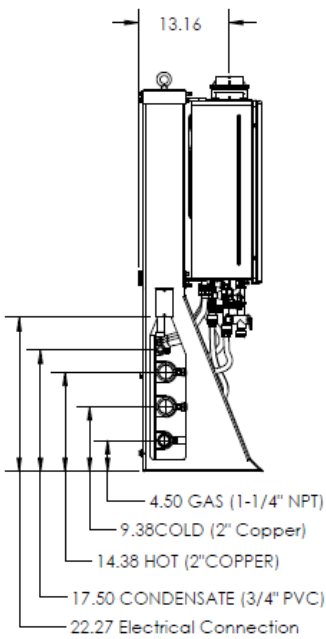
3 UNIT WALL MOUNT FRAME

Model	TRS03ILW	TRS23ILW
Water Heater Model	C199i, C199e (NG/LP)	
Crate Dimensions (HxLxD) - in	66 x 67 x 35	
Weight - Fully Assembled - lbs	291	218
Weight - Shipping (total) - lbs	487	414
Rack Frame - Specifications		
Frame Rail Type	Sheet Metal	
Frame Material	Aluminum (0.090 5052-H32)	
Frame Finish	Powder Coat	
Color	Gray	
Water, Gas, and Condensate Connections		
Hot Water Trunk Line Diameter	2"	
Cold Water Trunk Line Diameter	2"	
Hot Water Trunk Line Material	Rigid Copper	
Cold Water Trunk Line Material	Rigid Copper	
Water Trunk Connection Type	2" PIPE	
Gas Trunk Line Diameter	1-1/4"	
Gas Trunk Connection Type	1-1/4" MNPT	
Gas Trunk Line Material	Sch 40 Steel	
Gas Branch Line Material	PVC Over CSST	
Condensate Trunk Line Diameter	3/4"	N/A
Condensate Trunk Line Material	Sch-40 PVC	N/A
Condensate Trunk Connection Type	3/4" Pipe	N/A
Electric Requirements		
Prewired Electrical Assembly	Yes (Indoor Models Only)	N/A
Voltage	AC 120 Volts—60 Hz	
Maximum Current (Amperes)	12	8
BTU and Flow Rates for C199i, C199e (NG/LP)		
Number of Tankless Water Heaters	3	2
Flow rate @ 70°F rise (gpm)	16.2	10.8
Flow rate @ 100°F rise (gpm)	11.4	7.6
Minimum input rate (Btuh)	15,200	15,200
Maximum input rate (Btuh)	597,000	398,000

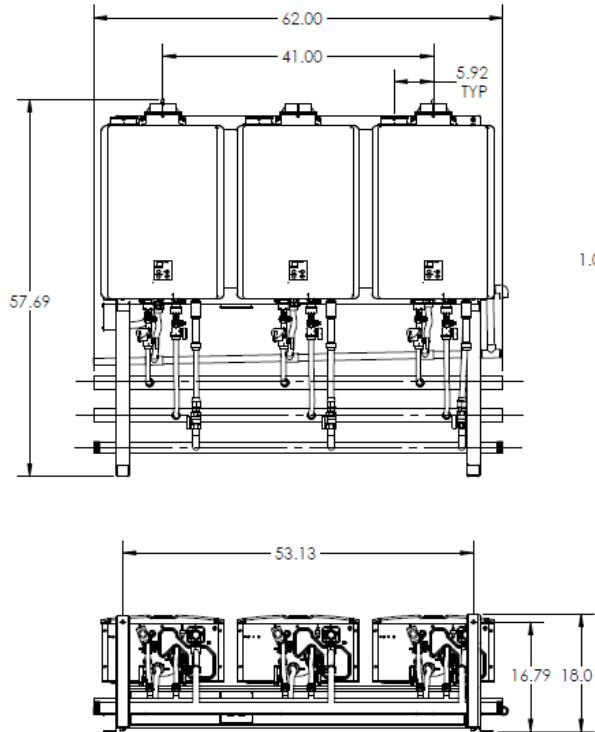


3 UNIT WALL MOUNT FRAME

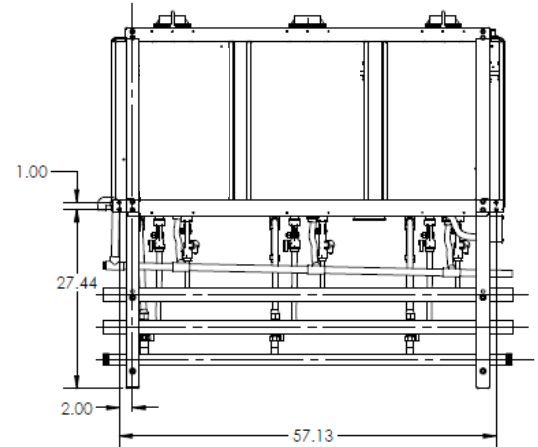
LEFT



FRONT



BACK

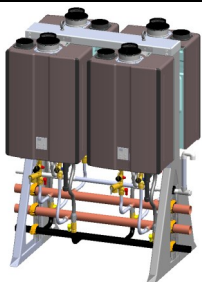


BOTTOM

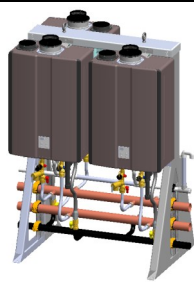
Model	Configuration	Illustration
TRS03ILW		
TRS23ILW		

4 UNIT FREE STANDING FRAME

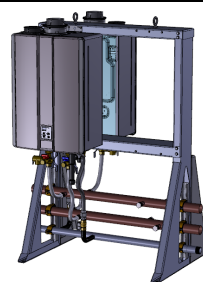
Model	TRS04	TRS03	TRS02	TRS02IL
Water Heater Model	C199i, C199e (NG/LP)			
Crate Dimensions (HxLxD) - in	66 x 67 x 35			
Weight - Fully Assembled - lbs	357	284	210	208
Weight - Shipping (total) - lbs	553	480	406	404
Rack Frame - Specifications				
Frame Rail Type	Sheet Metal			
Frame Material	Aluminum (0.090 5052-H32)			
Frame Finish	Powder Coat			
Color	Gray			
Water & Gas Connections				
Hot Water Trunk Line Diameter	2"			
Cold Water Trunk Line Diameter	2"			
Hot Water Trunk Line Material	Rigid Copper			
Cold Water Trunk Line Material	Rigid Copper			
Water Trunk Connection Type	2" PIPE			
Gas Trunk Line Diameter	1-1/4"			
Gas Trunk Connection Type	1-1/4" MNPT			
Gas Trunk Line Material	Sch 40 Steel			
Gas Trunk Branch Line Material	PVC Over CSST			
Condensate Trunk Line Diameter	3/4"			N/A
Condensate Trunk Material	Sch-40 PVC		N/A	
Condensate Trunk Connection Type	3/4" Pipe			N/A
Electric Requirements				
Prewired Electrical Assembly	Yes (Indoor Models Only)		N/A	
Voltage	AC 120 Volts—60 Hz			
Maximum Current (Amperes)	16	12	8	
BTU and Flow Rates for C199i, C199e (NG/LP)				
Number of Tankless Water Heaters	4	3	2	
Flow rate @ 70°F rise (gpm)	21.6	16.2	10.8	
Flow rate @ 100°F rise (gpm)	15.2	11.4	7.6	
Minimum input rate (Btuh)	15,200			
Maximum input rate (Btuh)	796,000	597,000	398,000	



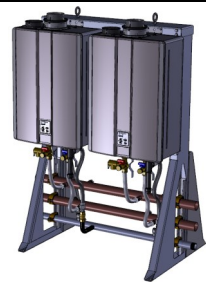
TRS04



TRS03

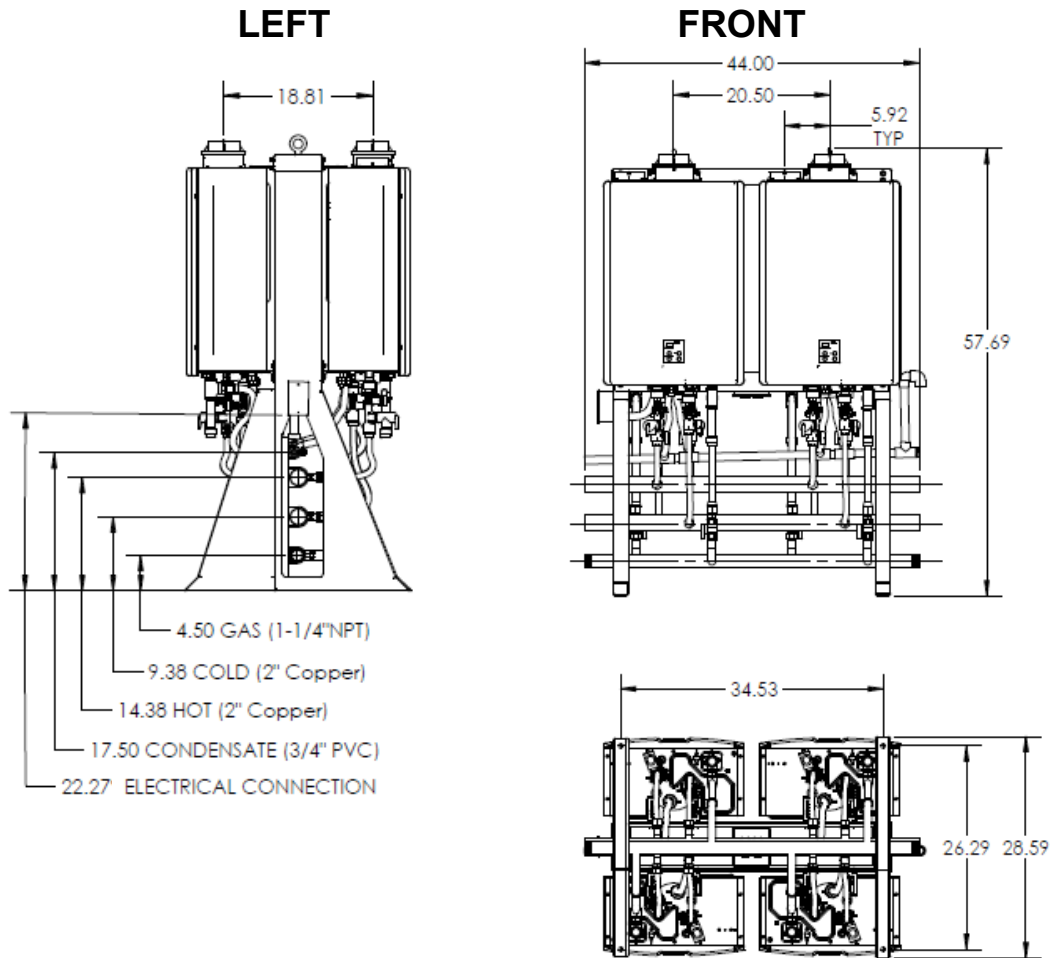


TRS02



TRS02IL

4 UNIT FREE STANDING FRAME



Model	Configuration	Illustration
TRS04		
TRS03		
TRS02IL	Inline (facing same direction)	
TRS02	Back to Back	

6 UNIT FREE STANDING FRAME

Model	TRS06	TRS05	TRS46	TRS36	TRS03IL	TRS23IL
Water Heater Model	C199i, C199e (NG/LP)					
Crate Dimensions (HxLxD) - in	66 x 67 x 35					
Weight - Fully Assembled - lbs	526	452	378	284	284	210
Weight - Shipping (total) - lbs	722	649	576	480	480	406

Rack Frame - Specifications

Frame Rail Type	Sheet Metal
Frame Material	Aluminum (0.090 5052-H32)
Frame Finish	Powder Coat
Color	Gray

Water & Gas Connections

Hot Water Trunk Line Diameter	2-1/2"	2"
Cold Water Trunk Line Diameter	2-1/2"	2"
Hot Water Trunk Line Material	Rigid Copper	
Cold Water Trunk Line Material	Rigid Copper	
Water Trunk Connection Type	2-1/2" PIPE	2" PIPE
Gas Trunk Line Diameter	1-1/2"	1-1/4"
Gas Trunk Connection Type	1-1/2" MNPT	1-1/4" MNPT
Gas Trunk Line Material	Sch 40 Steel	
Gas Branch Line Material	PVC Over CSST	
Condensate Trunk Line Diameter	3/4"	N/A
Condensate Trunk Line Material	Sch-40 PVC	N/A
Condensate Trunk Connection Type	3/4" Pipe	N/A

Electric Requirements

Prewired Electrical Assembly	Yes (Indoor Models Only)					N/A
Voltage	AC 120 Volts—60 Hz					
Max Current (Amperes)	24	20	16	12	12	8

BTU and Flow Rates for C199i, C199e (NG/LP)

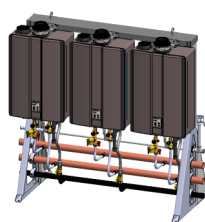
Number of Tankless Water Heaters	6	5	3	4	2
Flow rate @ 70°F rise (gpm)	32.4	27.0	16.2	21.6	10.8
Flow rate @ 100°F rise (gpm)	22.8	19.0	11.4	15.1	7.6
Minimum input rate (Btuh)	15,200				
Maximum input rate (Btuh)	1,194,000	995,000	597,000	796,000	398,000



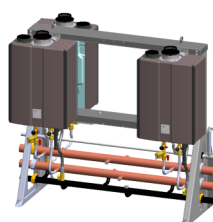
TRS06



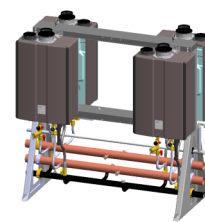
TRS05



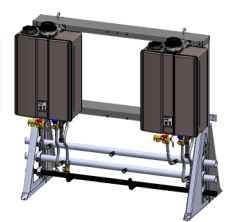
TRS03IL



TRS36



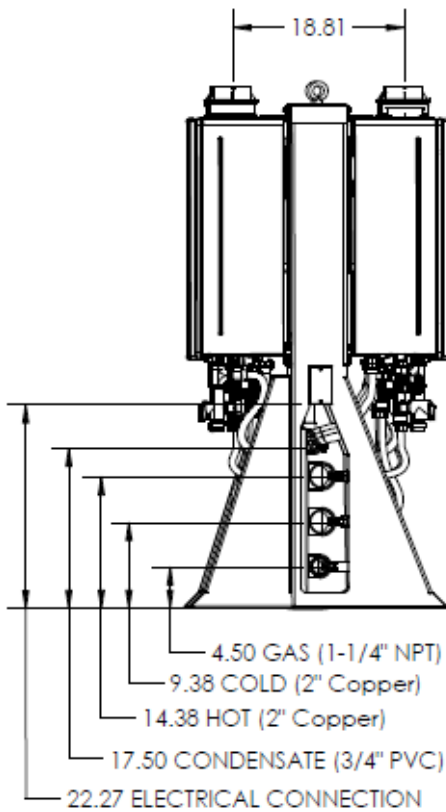
TRS46



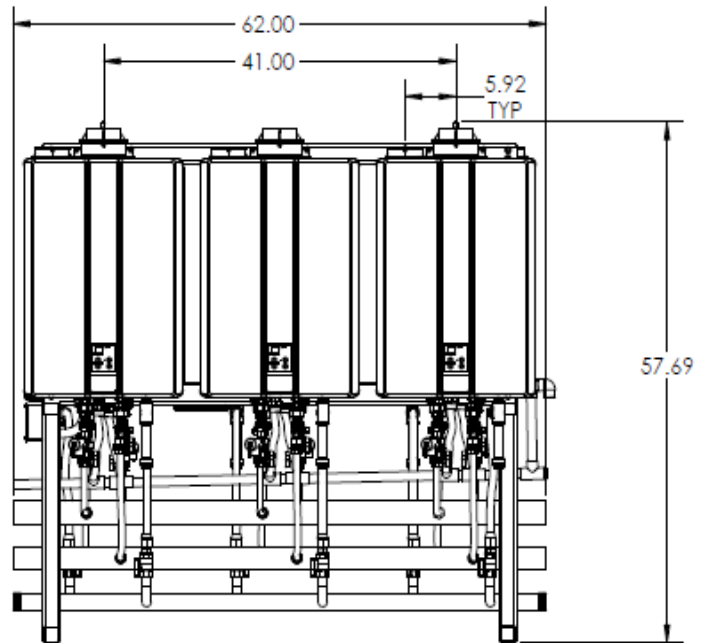
TRS23IL

6 UNIT FREE STANDING FRAME

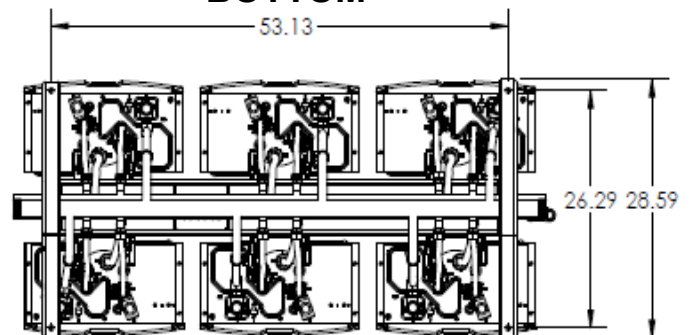
LEFT



FRONT



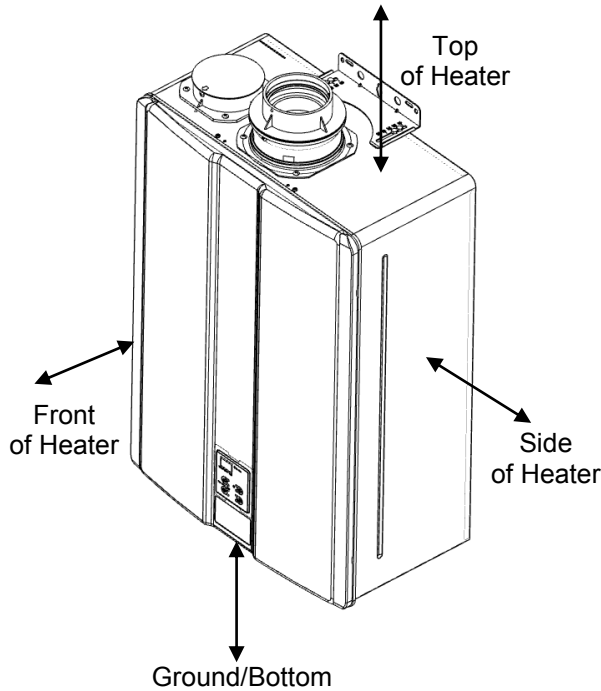
BOTTOM



Model	Configuration	Illustration	Model	Configuration	Illustration
TRS06			TRS06		
TRS05			TRS46		
TRS03IL			TRS23IL		

Clearances

Install the rack system so that the clearances shown below (specified for the water heater in the RUC98i and RU98e installation manual) are followed.



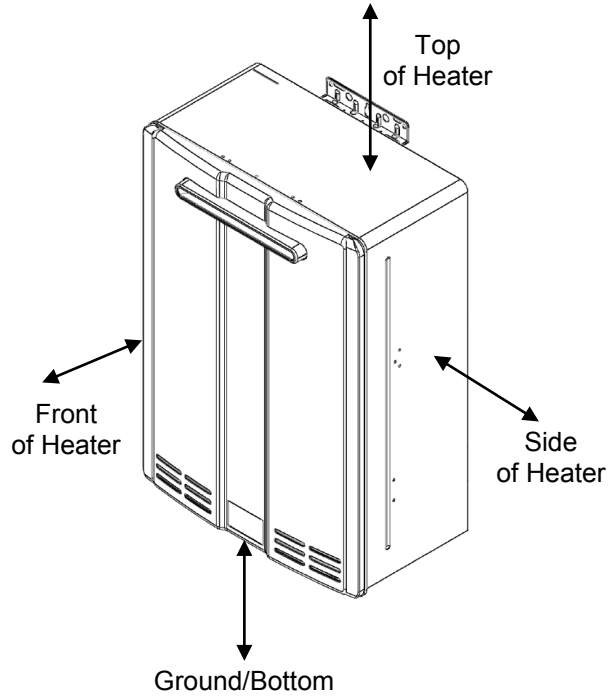
Indoor models: RU98i, RUC98i, C199i

	to Combustibles inches (mm)	to Non-Combustibles inches (mm)
Top of Heater	6 * (152)	2 *(51)
Back of Heater	0 (zero)	0 (zero)
Front of Heater	6 (152)	6 (152)
Sides of Heater	2 (51)	1/2 (13)
Ground/Bottom	12 (305)	12 (305)
Vent	0 (zero)	0 (zero)

* 0 inches from vent components and condensate drain line.

The clearance for servicing is 24 inches in front of the water heater.

For closet installation, clearance is 6 inches (152 mm) from the front.



Outdoor models: RU98e, C199e

	to Combustibles inches (mm)	to Non-Combustibles inches (mm)
Top of Heater	12 (305)	2 (51)
Back of Heater	0 (zero)	0 (zero)
Front (panel)	24 (610)	0 (zero)
Front (exhaust)	24 (610)	24 (610)
Sides of Heater	6 (152)	1/8 (3.2)
Ground/Bottom	12 (305)	2 (51)

The clearance for servicing is 24 inches in front of the water heater.

MSB Control System and EZConnect

- Each MSB-M board will connect up to 5 water heaters using the MSB-C1 kits.
- Up to 5 MSB-M boards can be connected together with communication cables (MSB-C2 kits) allowing up to 25 water heaters to operate as a single system.
- An MSB system could have an operating range of 15,200 BTU to as great as 5 million BTU. In terms of flow rate, 0.4 gpm to 245 gpm.
- When multiple water heaters are operating, they will attempt to supply equal amounts of hot water.
- The temperature setting for all of the connected water heaters is controlled by the temperature controller connected to the water heater with the Master MSB Board. Temperature controllers connected to the other units will provide maintenance codes for their respective units.
- On applicable models a single MCC-91-2 can be connected to the master MSB Board to provide temperatures greater than 140°F for all the water heaters in the MSB system.
(C199 models do not require the use of an MCC-91-2 controller for temperatures greater than 140°F.)
- The order in which each water heater operates is occasionally rotated to ensure equal usage among the entire system.
- Detailed installation instructions are provided with each of the kits.

NOTE: For tankless only systems, reference MSB installation instructions to ensure distance between racks do not exceed MSB communication cable length.

* The Rinnai EZConnect™ is specifically designed for connecting only 2 water heaters.

No. of water heaters	Number of Components Required		
	MSB-M	MSB-C1	MSB-C2
2*	1	NA	NA
3	1	1	NA
4	1	2	NA
5	1	3	NA
6	2	2	1
7	2	3	1
8	2	4	1
9	2	5	1
10	2	6	1
11	3	5	2
12	3	6	2
13	3	7	2
14	3	8	2
15	3	9	2
16	4	8	3
17	4	9	3
18	4	10	3
19	4	11	3
20	4	12	3
21	5	11	4
22	5	12	4
23	5	13	4
24	5	14	4
25	5	15	4

MSB-M kit includes

- Control board
- Cable A (23 in, 585 mm)
- Cable B (9.8 ft, 3 m)
- Brackets, ties, and screws
- Instructions

MSB-C1 kit includes

- Cable B (9.8 ft, 3 m)
- Brackets, ties, and screws
- Instructions

MSB-C2 kit includes

- MSB Cable (26.2 ft, 8 m)
- Terminal connectors
- Instructions

A tradition of

TRUE RELIABILITY.

For nearly 100 years, we at Rinnai have been fiercely committed to delivering nothing less than a superior experience at every touch point.

Beyond manufacturing the highest quality products, our people stand behind all that we make—before, during and long after installation. From the 24/7/365 technical support for professionals, to our national network of independent installers for homeowners, to on-staff engineers who can assist with choosing the right products and sizes—we're inspiring confidence right along with the comfort our solutions provide.



Learn more about Rinnai high-performance Tankless Water Heaters, Hybrid Tank-Tankless Water Heaters, Boilers, Vent-Free Fan Convectors and Direct Vent Wall Furnaces at www.rinnai.us

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