Certified Drawing --- Type: NYWC --- JAN2020 --- Applied Comfort Products Carver Inc. --- www.ptacs.com --- Applied Comfort Packaged Terminal Air Conditioner with Top-Mounted Hydronic Heat 16" x 42" Model NYWC Flat Top --- Size 7, 9, 12, 15, 17000 Btuh Nominal Cooling --- R-410A Refrigerant General Specifications

Heating/Cooling Chassis.

- **Safety Compliance** -- The NYWC is a Listed product eligible to bear the CSA Mark of cCSAus (US and Canada Safety Compliance). The NYWC is produced in a CSA inspected factory in Cambridge, Ontario, Canada.
- **3rd Party Energy Performance Verification** -- The Cooling-Capacity and Energy Performance Verification Testing for the N Series of chassis is conducted by Intertek Labs and the test reports are available upon request these tests cover the full range of cooling outputs available for the N Series. Note that the performance verification testing conducted on the N chassis is with hydronic coils in place to recognize the higher static pressures encountered with the hydronic installation. Cooling-Capacity Tests conducted in accordance with ANSI/ASHRAE Standard 310/380 and CAN/CSA Standard C744.
- **General Construction** -- Factory-assembled and tested, self-contained, complete air-cooled refrigeration system with R-410A refrigerant using two low-noise high-static pressure dual-inlet evaporator blowers, and one dual-inlet condenser blower with efficient condensate removal system and optional manual fresh air damper or optional automatic damper. Hydronic heat has a 24V valve signal, with hydronic coil mounting via brackets to top of sleeve above chassis. Power cord exists from under right side of chassis. Surfaces in contact with the airstream comply with requirements in ASHRAE 62.1.

Wall Sleeve

• Industry standard 16" x 42", made of 1.3mm (18 gauge) galvanized phosphatized steel. Coated with electrostatically applied, baked-on, industry-standard beige polyester powder paint for maximum corrosion protection. Completely insulated.

Room Cabinet

• Top discharge with stamped one-piece grille. Control access door on right side. Enclosure completely encloses controls and piping. 4" nominal height, black kick plate adjustable from 3" to 5". Front panel is removable without use of tools to provide access to filters and cooling unit. Filter is removable with the use of tools. Made of 1.3mm (18 gauge) phosphatized steel. Coated with electrostatically applied, baked-on industry-standard beige polyester powder paint.

Louvers

• Architectural type with silver powder-coating baked on.

Power Cord

LCDI power cord supplied with the 230-208V chassis, and standard non-LCDI cord set with the 277V chassis.

Power Air Damper for Fresh Air (optional)

• A power motorized door for fresh air opens when evaporator blowers are energized, and automatically closes when the evaporator blower is not energized.

Refrigeration System

• Direct expansion indoor coil with capillary restrictor, and rotary compressor with vibration isolation and overload protection.

Indoor and Outdoor Coils

Seamless copper tubes mechanically expanded into aluminum.

Charge

• R410A refrigerant.

Evaporator Fan:

• One direct drive, dual-shaft with permanent split capacitor two-speed motor. The evaporator fan consists of two centrifugal dual-inlet blower type.

Condenser Fans:

• One direct drive with permanent split capacitor motor. The condenser fan is a centrifugal dual-inlet blower type. The housing is phosphatized and powder-coated steel for durability.

Filters

• Washable aluminum weave filter in a durable aluminum frame.

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Condensate Drain

• Drain pan to direct condensate to outdoor coil for re-evaporation. Optional drain kit allows for industry standard connection to indoor or outdoor drains.

Digital Touchpad Control

- The NYWC Digital Control controls the integral air conditioner and heat source via a touchpad, or optional remote 24-volt wall mounted thermostats.
- Temperature-Limit Control: prevents occupant from exceeding preset, setback, or setup temperature.
- Chassis comes with standard 7-wire connection harness for thermostats; control by external thermostat is enabled using DIP switches.

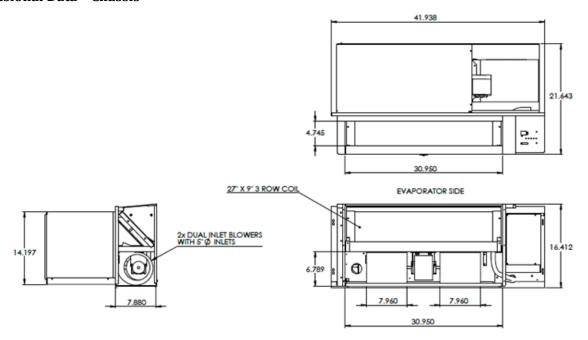
Sound-Power Level Ratings

OITC sound rating test performed by ETL labs (Intertek Labs USA) to comply with ARI 300 standards.

Unit Performance Ratings

• Factory test according to AHRI 310/380/CSA C744, "Packaged Terminal Air-Conditioners and Heat Pumps." 3rd Party energy performance verification tests conducted by Intertek ETL labs.

Dimensional Data - Chassis



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Performance Data - 3rd Party Lab Verified by Intertek Labs

NYWC Air Conditioner for use with TOP-MOUNTED Hydronic Heat Coil -- Separate Room Cabinet

CORD CONNECTED with LCDI Cord.

Model	Voltage	Hz	Min. Circuit	MOP Fuse	Electrical Plug	Cooling					Resistance Heat			Indoor CFM	Indoor	Net Wt.
model	voltage		Amps	Amps	(NEMA)	BTU/Hr.	EER	Amps	S/T	Pts./hr.	BTU/Hr.	kW	Amps	HIGH°	CFM LOW°	lbs.
NYWC07L00E6	115	60	8.3	15	#5-15P	7300	11.8	6.4	0.83	1.1	N/A	N/A	N/A	310	265	150
NYWC09L00E6	"	"	11.9	-	-	9600	11.3	8.4	0.73	2.2	N/A	N/A	N/A			"
NYWC12L00E7		"	16.3	20	#5-20P	12600	10.6	12.0	0.70	3.4	N/A	N/A	N/A	360	310	"
NYWC07K00E7	230 - 208	"	4.1	20	#6-20P	7300	11.8	3.2/3.4	0.83	1.1	N/A	N/A	N/A	325/300	290/250	"
NYWC09K00E7	"	"	5.7			9600	11.3	4.2/4.4	0.73	2.2	N/A	N/A	N/A			"
NYWC12K00E7	"	"	8.1			12600	10.6	6.0/6.2	0.70	3.4	N/A	N/A	N/A	370/350	325/300	"
NYWC15K00E7	"	"	9.9			14800	9.8	7.5/7.7	0.66	4.5	N/A	N/A	N/A	"	"	"
NYWC17K00E7	"	"	12.2			16100	8.4	9.2/9.4	0.65	5.0	N/A	N/A	N/A	420/410	380/360	"
NOTE: Chassis can l	be built wit	th 15A	mp cord	s (NEMA	\#5-15P fo	r 115V;	#6-15P f	or 208-2	30V) as	special o	order for m	odels with	MOP fuse	amps liste	d above a	s 15.

Non-LCDI Cord plugs into hard-wired receptacle in Subbase.

Non Eed Cord plags into hard when receptacie in Subbase.																
Model	Voltage	Hz	Min. Circuit	MOP Fuse	Electrical Plug	Cooling					Resistance Heat			Indoor CFM	Indoor	Net Wt.
model	Voltage		Amps	Amps	_	BTU/Hr.	EER	Amps	S/T	Pts./hr.	BTU/Hr.	kW	Amps	HIGH°	CFM LOW°	lbs.
NYWC07R00E2	277		3.7	15	#7-20P	7300	11.8	3.0	0.88	0.8	N/A	N/A	N/A	360	310	150
NYWC09R00E2		"	5.4		"	9600	11.3	4.0	0.77	1.9	N/A	N/A	N/A			
NYWC12R00E2	"		7.2		"	12600	10.6	5.3	0.70	3.4	N/A	N/A	N/A			"
NYWC15R00E2			8.8			14800	9.8	6.6	0.66	4.5	N/A	N/A	N/A			- "
NVWC17R00F2	"		10.4		"	16100	8.4	8.1	0.65	5.0	N/A	N/A	N/A	410	370	

Hydronic Heat Performance

Model	Voltage	Hz	Hot Water Heat HIGH SPEED	Hot Water Heat LOW SPEED	Water Flow Rate	Coil Pressure Drop (HIGH SPEED)	Steam Heat HIGH SPEED	Steam Heat LOW SPEED	Steam Pressure Drop	Heating Current Amps
			BTU/Hr.	BTU/Hr.	USGPM	Ft of Water	BTU/Hr.	BTU/Hr.	psi	
NYWC07L, 09L	115	60	16500	15500	1.7	3.0	19900	18600	0.13	<1
NYWC12L	"		17800	16700	1.8	3.4	21400	19600		"
NYWC07K, 09K	230 - 208		16900/16300	16100/15100	1.8 - 1.7	3.1 - 2.9	20400/19600	19400/18100		"
NYWC12K,15K			18100/17600	17100/16500	1.9 - 1.8	3.5 - 3.3	21600/21100	20400/19600		
NYWC17K	"		19200/19000	18400/19000	2.0 - 1.9	3.8 - 3.6	22900/22600	21900/21400		"
NYWC07R,09R,12R,15R	277		17800	16700	1.8	3.4	21400	19900		"
NYWC17R			19000	18200	1.9	3.7	22600	21600		"
NYWC07S,09S,12S,15S	115 230-208	-	18100	17100	1.9	3.5	21600	20400	"	"
NYWC17S	115 230-208		18900	18100	2.0	3.6	22500	21700	"	"
NYWC07U,09U,12U,15U	115 277		18100	17100	1.8	3.4	21400	19900	"	"
NYWC17U	115 277	-	18900	18100	1.9	3.9	22400	21300	"	"

Cooling performance is rated in accordance with ASHRAE/AHRI Standard 310/380 and tested with HYDRONIC COIL IN PLACE. Maximum Steam Pressure: 2 psig ---- Steam ratings based on 70°F entering air, and 2 psig steam pressure with heat output automatically adjusting for blower speed. Maximum Water Temperature: 210°F ---- HIGH SPEED Water ratings based on ASHRAE/AHRI conditions of 70°F entering air, 200°F entering water and 180°F leaving water temperatures. LOW SPEED Water ratings based on water ow rate set for HIGH SPEED rating condition operating point.

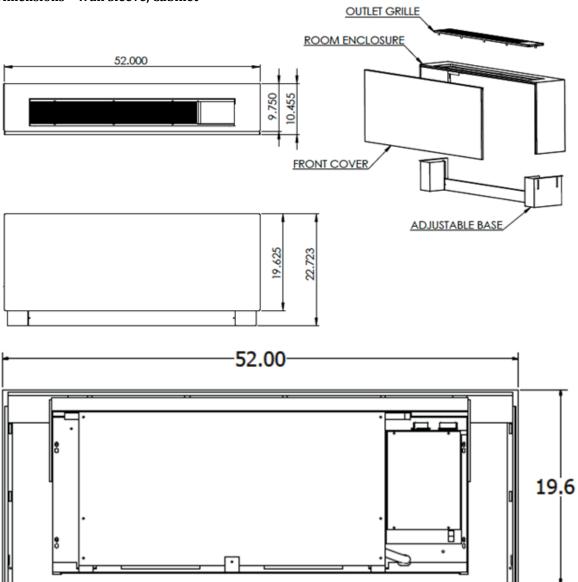
Maximum Output to Valve: 25 VA at 24 VAC.

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Physical Data

Heating/Cooling Chassis and Front Panel Size Nominal 7000/9000//12000//15000/17000 Btuh......138//140//142//146//148 lbs

Unit Dimensions - Wall Sleeve, Cabinet



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Unit Dimensions - Wall Profile

NOTE: Sleeve must be installed a minimum of 3 7/8" off the floor.

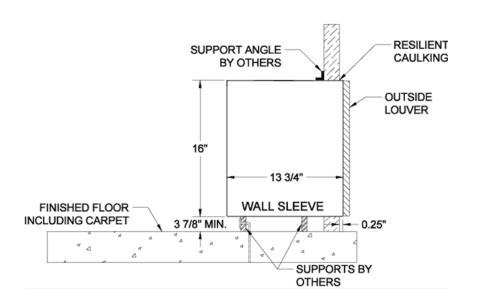
THICK WALL CONSTRUCTION INDOOR FINISHED WALL BRICKSTOP BY OTHERS RESILIENT CALKING 16" 13 3/4" WALL SLEEVE FINISHED FLOOR INCLUDING CARPET 3 7/8" MIN ٠.۵.٠ 0.25" 1 5/8"

Unit Dimensions - Sleeve

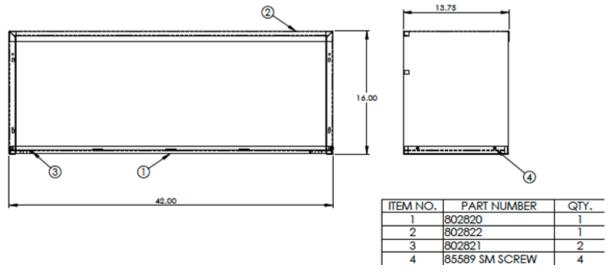
NOTE: Sleeve must be installed a minimum of 3-7/8" off the floor.

MIN. AT BOTTOM.

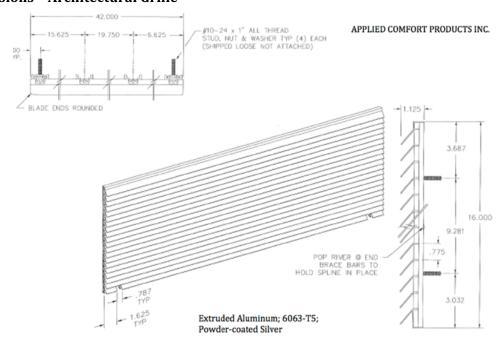
THIN WALL CONSTRUCTION



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Unit Dimensions - Architectural Grille



Certified Drawing --- Type: NYWC --- Date: Jan 2020 --- Applied Comfort Products Carver Inc.
Applied Comfort Packaged Terminal Air Conditioner with Top-Mounted Hydronic Heat

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Wiring diagram

