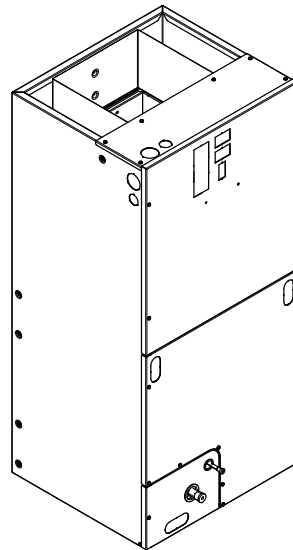


Submittal

Variable Speed Convertible Air Handler 3-1/2 Ton

TEM8A0C42V41DB



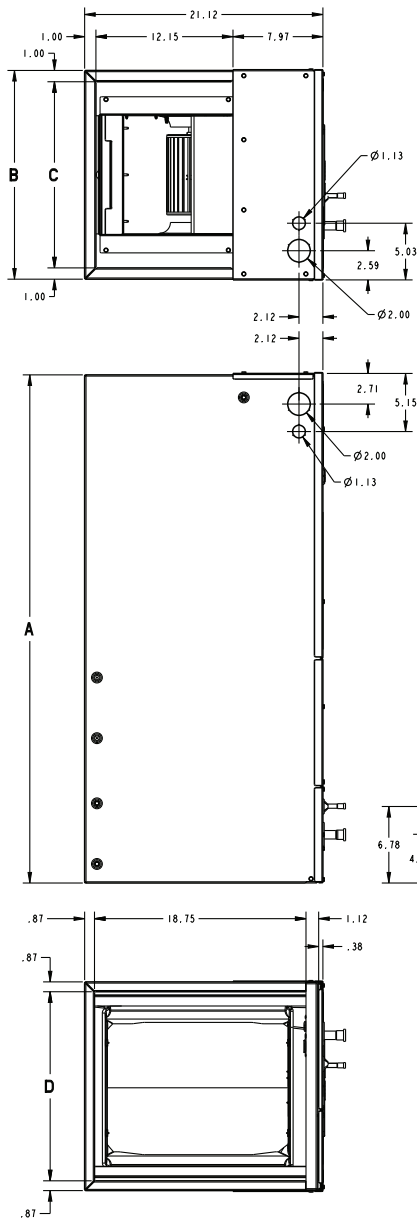
Note: The TEM8 series air handler is designed for installation in a closet, utility room, alcove, basement, crawlspace or attic. These versatile units are applicable to air conditioning and heat pump applications. Several models are available to meet the specific requirements of the outdoor equipment. Field installed electric resistance heaters are available.

TAG: _____

▲ SAFETY WARNING

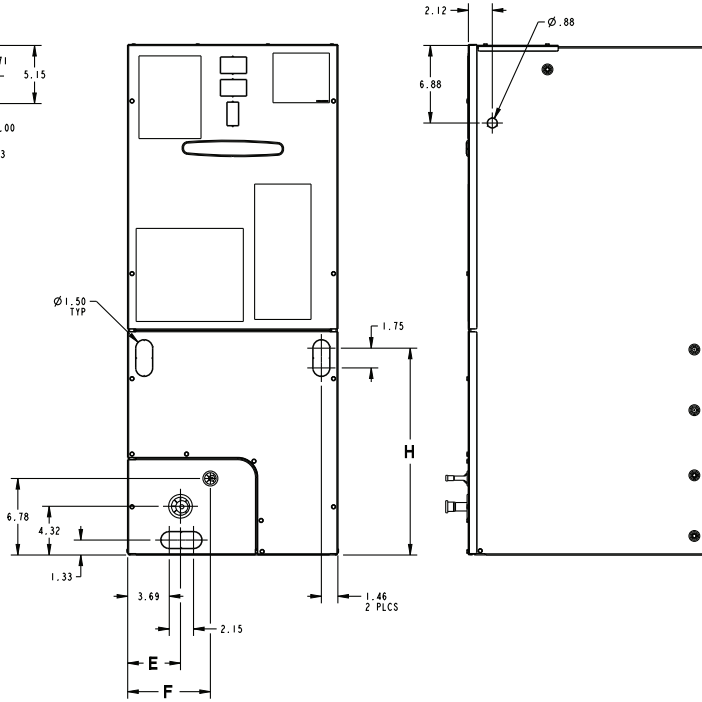
Only qualified personnel should install and service the equipment. The installation, starting up, and servicing of heating, ventilating, and air-conditioning equipment can be hazardous and requires specific knowledge and training. Improperly installed, adjusted or altered equipment by an unqualified person could result in death or serious injury. When working on the equipment, observe all precautions in the literature and on the tags, stickers, and labels that are attached to the equipment.

Outline Drawing



MINIMUM UNIT CLEARANCE TABLE	
	SERVICE CLEARANCE (RECOMMENDED)
SIDES	2"
FRONT	21"
BACK	0"
INLET DUCT	1"
OUTLET DUCT	N/A

NOTE: THIS UNIT IS APPROVED FOR INSTALLATION CLEARANCES TO COMBUSTIBLE MATERIAL AS STATED ON THE UNIT RATING NAMEPLATE



PRODUCT DIMENSIONS									
Air Handler Model	A	B	C	D	E	F	H	Flow Control	Gas Line Braze
TEM8A0C42V41DB	51.27	23.50	21.50	21.75	7.01	9.66	24.59	TXV	7/8

All dimensions are in inches

Product Specifications

MODEL	TEM8A0C42V41DB
RATED VOLTS/PH/HZ	208-230/1/60
RATINGS^(a)	See O.D. Specifications
INDOOR COIL — Type	Plate Fin
Rows — F.P.I.	4 - 14
Face Area (sq. ft.)	4.59
Tube Size (in.)	3/8
Refrigerant Control	TXV
Drain Conn. Size (in.) ^(b)	3/4 NPT
DUCT CONNECTIONS	See Outline Drawing
INDOOR FAN — Type	Centrifugal
Diameter-Width (In.)	11 X 8
No. Used	1
Drive - No. Speeds	Direct - 16
CFM vs. in. w.g.	See Fan Performance Table
No. Motors — H.P.	1 - 1/2
Motor Speed R.P.M.	Variable
Volts/Ph/Hz	208-230/1/60

F.L. Amps	3.9
FILTER	
Filter Furnished? ^(c)	No
REFRIGERANT	R-410A
Ref. Line Connections	Brazed
Coupling or Conn. Size — in. Gas	7/8
Coupling or Conn. Size — in. Liq.	3/8
DIMENSIONS	H x W x D
Crated (In.)	52-3/4 x 27-1/2 x 25-1/2
Uncrated	51-3/8 x 23-1/2 x 21-1/8
WEIGHT	
Shipping (Lbs.) / Net (Lbs.)	155/144

^(a) These Air Handlers are A.H.R.I certified with various Split System Air Conditioners and Heat Pumps (AHRI STANDARD 210/240). Refer to the Split System Outdoor Unit Product Data Guides for performance data.

^(b) 3/4" Male Plastic Pipe (Ref: ASTM 1785-76)

^(c) Remote filter required.

Minimum Airflow CFM

TEM8A0C42V41DB		
Heater	Minimum Heater Airflow CFM	
	With Heat Pump	Without Heat Pump
BAYHTR1504BRK, BAYHTR1504LUG BAYHTR1505BRK, BAYHTR1505LUG	675	675
BAYHTR1508BRK, BAYHTR1508LUG	950	900
BAYHTR1510BRK, BAYHTR1510LUG	950	900
BAYHTR1517BRK	950	900
BAYHTR3510LUG	950	900
BAYHTR3517LUG	1050	950
BAYHTR1523BRK	1500	1300

Heater Pressure Drop Table

Airflow CFM	Number of Racks				Heater Racks	
	1	2	3	4	Heater Model	No. of Racks
	Air Pressure Drop — Inches W.G.					
1800	0.02	0.04	0.06	0.14	BAYHTR1504	1
1700	0.02	0.04	0.06	0.14	BAYHTR1505	1
1600	0.02	0.04	0.06	0.13	BAYHTR1508	2
1500	0.02	0.04	0.06	0.12	BAYHTR1510	2
1400	0.02	0.04	0.06	0.12	BAYHTR1516	3
1300	0.02	0.04	0.05	0.11	BAYHTR3510	3
1200	0.01	0.04	0.05	0.10	BAYHTR3515	3
1100	0.01	0.03	0.05	0.09	BAYHTR1517	3
1000	0.01	0.03	0.04	0.09	BAYHTR1522	4
900	0.01	0.03	0.04	0.08	BAYHTR1523	4
800	0.01	0.03			BAYHTR3517	3
700	0.01	0.02			BAYHTR1525	4
600	0.01	0.02				

Subcooling Adjustment

System Matched with:	Indoor Unit Model No.	Outdoor Model No.	Subcooling
16 SEER HP — 2 ton	TEM8A0C36V31	4TWR6024H1000A 4TWX6024H1000A 4A6H6024H1000A	13 Degrees
15 SEER HP — 2 ton	TEM8A0B24V21 TEM8A0B30V31	4TWR5024G1000A 4A6H5024G1000A	14 Degrees
15 SEER HP — 3 ton	TEM8A0B30V31 TEM8A0C36V31 TEM8A0C42V41	4TWR5036G1000A 4A6H5036G1000A	14 Degrees
All other matches must be charged per the nameplate charging instructions			

Performance and Electrical Data

OUTDOOR MULTIPLIER (TONS)	TEM8A0C36V31DB & TEM8A0C42V41DB AIRFLOW PERFORMANCE										CONSTANT CFM MODE / CONSTANT TORQUE MODE									
	COOLING AIRFLOW SETTING	AIRFLOW POWER	EXTERNAL STATIC PRESSURE (Constant CFM / Constant Torque)					HEATING AIRFLOW SETTING	AIRFLOW POWER	EXTERNAL STATIC PRESSURE										
			0.1	0.3	0.5	0.7	0.9			0.1	0.3	0.5	0.7	0.9						
2.5 tons	290 CFM/ton	CFM Watts	735/837	727/702	700/593	673/415	660/415	290 CFM/ton	CFM Watts	735	727	700	673	660						
	350 CFM/ton	CFM Watts	883/972	884/849	882/746	881/657	870/577	350 CFM/ton	CFM Watts	883	884	882	881	870						
	400 CFM/ton	CFM Watts	1007/1084	1016/971	1033/874	1020/788	1010/711	400 CFM/ton	CFM Watts	1007	1016	1033	1020	1010						
	450 CFM/ton	CFM Watts	1133/1198	1146/1093	1176/1001	1140/919	1130/845	450 CFM/ton	CFM Watts	1133	1146	1176	1140	1130						
	290 CFM/ton	CFM Watts	878/993	879/872	876/771	874/682	865/602	290 CFM/ton	CFM Watts	878	879	876	874	865						
3 tons	350 CFM/ton	CFM Watts	1057/1154	1068/1045	1091/952	1070/869	1060/793	350 CFM/ton	CFM Watts	1057	1068	1091	1070	1060						
	400 CFM/ton	CFM Watts	1209/1289	1223/1190	1255/1102	1210/1024	1190/952	400 CFM/ton	CFM Watts	1209	1223	1255	1210	1190						
	450 CFM/ton	CFM Watts	1364/1426	1375/1334	1393/1253	1340/1179	1330/1110	450 CFM/ton	CFM Watts	1364	1375	1393	1340	1330						
	290 CFM/ton	CFM Watts	1022/1123	1031/1012	1050/917	1030/832	1030/756	290 CFM/ton	CFM Watts	1022	1031	1050	1030	1030						
	350 CFM/ton	CFM Watts	178/227	229/254	288/274	367/288	420/299	350 CFM/ton	CFM Watts	178	229	288	367	420						
3.5 tons	400 CFM/ton	CFM Watts	1416/1471	1424/1383	1399/1303	1380/1230	1163	400 CFM/ton	CFM Watts	1416	1424	1399	1303	1370						
	450 CFM/ton	CFM Watts	1601/1618	1591/1536	1547/1462	1500/1394	1390/1330	450 CFM/ton	CFM Watts	1601	1591	1547	1500	1390						
	290 CFM/ton	CFM Watts	1168/1276	1182/1175	1182/1087	1170/1007	1160/935	290 CFM/ton	CFM Watts	1168	1182	1182	1170	1160						
	350 CFM/ton	CFM Watts	155/209	204/235	260/254	337/268	390/279	350 CFM/ton	CFM Watts	155	204	260	337	390						
	400 CFM/ton	CFM Watts	1416/1492	1424/1404	1399/1325	1380/1252	1185	400 CFM/ton	CFM Watts	1416	1424	1399	1380	1370						
4 tons †	400 CFM/ton	CFM Watts	1628/1616	1614/1535	1534/1461	1500/1393	1390/1329	400 CFM/ton	CFM Watts	1628	1614	1534	1500	1390						
	450 CFM/ton	CFM Watts	1714/1605	1686/1525	1550/1452	1500/1385	1390/1321	450 CFM/ton	CFM Watts	1714	1686	1550	1500	1390						
	290 CFM/ton	CFM Watts	431/435	505/468	584/492	617/510	520/570	290 CFM/ton	CFM Watts	431	505	584	617	520						
	350 CFM/ton	CFM Watts	155/209	204/235	260/254	337/268	390/279	350 CFM/ton	CFM Watts	155	204	260	337	390						
	400 CFM/ton	CFM Watts	1416/1492	1424/1404	1399/1325	1380/1252	1185	400 CFM/ton	CFM Watts	1416	1424	1399	1380	1370						

- † Factory Setting
- Status LED will blink once per 100 CFM requested. In torque mode, actual airflow may be lower.
- In communicating mode, default CFM/Ton is 400.
- Torque mode will reduce airflow when static is above approximately 0.3" water column.
- All heating modes default to Constant CFM.
- Cooling airflow values are with wet coil, no filter

Performance and Electrical Data

1. See Product Data or Air Handler nameplate for approved combinations of Air Handlers and Heaters.
2. Heater model numbers may have additional suffix digits.

Note: Heater size needs to be set in Configuration Menu.

Table 1. Electrical Data

TEM8A0C36V31DB, TEM8A0C42V41DB HEATER DATA											
Heater Model No.	No. of Circuits/ Phases	240 Volt					208 Volt				
		Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection	Capacity		Heater Amps per Circuit	Minimum Circuit Ampacity	Maximum Overload Protection
		kW	BTUH				kW	BTUH			
No Heater				3.9 *	5	15			3.9 *	5	15
BAYHTR1504BRK BAYHTR1504LUG	1/1	3.84	13100	16.0	25	25	2.88	9800	13.8	22	25
BAYHTR1505BRK BAYHTR1505LUG	1/1	4.80	16400	20.0	30	30	3.60	12300	17.3	27	30
BAYHTR1508BRK BAYHTR1508LUG	1/1	7.68	26200	32.0	45	45	5.76	19700	27.7	39	40
BAYHTR1510BRK BAYHTR1510LUG	1/1	9.60	32800	40.0	55	60	7.20	24600	34.6	48	50
BAYHTR1517BRK Circuit 1 ^(a)	2/1	9.60	32800	40.0	55	60	7.20	24600	34.6	48	50
BAYHTR1517BRK Circuit 2		4.80	16400	20.0	25	25	3.60	12300	17.3	22	25
BAYHTR1523BRK Circuit 1 ^(a)	2/1	9.60	32800	40.0	55	60	7.20	24600	34.6	48	50
BAYHTR1523BRK Circuit 2		9.60	32800	40.0	50	50	7.20	24600	34.6	43	45
BAYHTR3510LUG	1/3	9.60	32800	23.1	33	35	7.20	24600	20.0	29	30
BAYHTR3517LUG	1/3	14.40	49100	34.6	48	50	10.80	36900	30.0	42	45

* = Motor Amps

^(a) MCA and MOP for circuit 1 contains the motor amps

Features and Benefits

- Communicating or 24 V control
- Painted metal cabinet with captured foil face insulation
- 2% or less air leakage
- R-4.2 Insulating Value
- Multi-Position UP/Down Flow, Horizontal Left /Right
- ALL Aluminum Coil with Enhanced Patented Coil Fin
- Electric Heaters with polarized plug connections (sold as accessory)
- R-410A Thermal Expansion Valve
- Variable Speed ECM Motor
- Low Voltage Pigtail Connections
- Draw Through Design
- Horizontal Drain Pan
- Single Color
- Fused 24V Power
- **3 year warranty**
- **10-year warranty registered**
- **Optional extended warranty available**



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