

Explosion Proof
Window and Thru-Wall Air Conditioners
for
Hazardous and Severe Service

■ ***HazardCool***



■ ***SafetyCool***



**SCIENTIFIC
SYSTEMS**



EXPLOSION-PROOF AIR CONDITIONERS



Listed for Use Under
Class I, Groups B, C, D,
Division 2
Temperature Code T2C

SafetyCool Window or Thru-Wall Air Conditioners 60 Hertz

Schedule "A"



Listed for Use Under
Class I, Groups B, C, D,
Division 2
Temperature Code T2C

COOLING ONLY, 60 Hz⁽⁴⁾, Class I, Groups B^(), C and D, Division 2** **UL and cUL Listed for U. S. and Canada**
ALL IBCD2 UNITS INCLUDE REMOTE CONTROL BOX

MODEL	COOL ⁽³⁾⁽⁷⁾	VAC	FUSE	HEIGHT ⁽⁵⁾	WIDTH ⁽⁵⁾	DEPTH ⁽⁵⁾	WEIGHT ⁽⁶⁾
	BTUH		AMPS	INCHES	INCHES	INCHES	NET LBS
WACX-1214-ICD2	12,000	115	15	15-15/16	25-15/16	27-3/8	124
WACX-1214-IBCD2	12,000	115	15	15-15/16	25-15/16	27-3/8	124
WACX-1804-ICD2	20,000	208/230	15	17-15/16	25-15/16	27-3/8	175
WACX-1804-IBCD2	20,000	208/230	15	17-15/16	25-15/16	27-3/8	175
WACX-2404-ICD2	24,000	208/230	20	17-15/16	25-15/16	27-3/8	212
WACX-2404-IBCD2	24,000	208/230	20	17-15/16	25-15/16	27-3/8	212
WACX-3604-ICD2	36,000	208/230	30	20-3/16	28-0/0	33-5/8	236
WACX-3604-IBCD2	36,000	208/230	30	20-3/16	28-0/0	33-5/8	236

COOLING AND ELECTRIC HEAT^(1,2,), 60 Hz⁽⁴⁾, Class I, Group B⁽⁸⁾, C and D, Division 2

MODEL	COOL ⁽³⁾⁽⁷⁾	HEAT ⁽³⁾	VAC	FUSE	HEIGHT ⁽⁵⁾	WIDTH ⁽⁵⁾	DEPTH ⁽⁵⁾	WEIGHT ⁽⁶⁾
	BTUH	BTUH		AMPS	INCHES	INCHES	INCHES	NET LBS
WACX-0752-EH-0768	8,400	7,677	115	25	15-15/16	25-15/16	42-3/4	275
WACX-1102-EH-0960	11,800	9,596	115	30	15-15/16	25-15/16	42-3/4	285
WACX-1102-EH-1152	11,800	11,516	115	35	15-15/16	25-15/16	42-3/4	285
WACX-1202-EH-0705	11/900/12,100	7,051	208/230	15	15-15/16	25-15/16	42-3/4	285
WACX-1202-EH-1234	11/900/12,100	12,339	208/230	20	15-15/16	25-15/16	42-3/4	285
WACX-1802-EH-1058	17,500/17,300	10,576	208/230	20	17-15/16	25-15/16	42-3/4	310
WACX-1802-EH-1763	17,500/17,300	17,626	208/230	30	17-15/16	25-15/16	42-3/4	310
WACX-2402-EH-1747	23,500/23,500	17,467	208/230	30	17-15/16	25-15/16	42-3/4	320
WACX-2402-EH-2329	23,500/23,500	23,290	208/230	35	17-15/16	25-15/16	42-3/4	320
WACX-2752-EH-1941	27,700/28,000	19,408	208/230	30	20-3/16	28-0/0	47-7/8	325
WACX-2752-EH-2523	27,700/28,000	25,230	208/230	40	20-3/16	28-0/0	47-7/8	330
WACX-3502-EH-2135	35,700/36,000	21,349	208/230	35	20-3/16	28-0/0	47-7/8	335
WACX-3502-EH-2717	35,700/36,000	27,171	208/230	40	20-3/16	28-0/0	47-7/8	335

(1) Manufacturer certified, not CSA listed. Heaters rated for NEC Identification Code T2A. Suitable for use in hazardous locations containing compounds with ignition temperatures of 536°F (280°C) or higher.

(2) Free-standing, UL or CSA listed Electric Heaters are also available. These are rated for Class I, Groups C or D and Class II, Groups E, F, and G with NEC Identification Numbers T2A, T2B or T3B. (Bulletin EXHE1PSS). (3)

208/230 models are rated at 230 Volts. Deduct 18% for heater rating at 208 Volts.

(4) For 50 Hz models request Price List SAEX5PRL.

(5) **Request certified drawings before making cutouts!** Dimensions subject to change.

(6) Add 45 lbs. for cardboard domestic, 65 to 80 lbs. for air crate, or 120 to 180 lbs. for sea crate.

(7) Rated at 95°F (35°C) dry bulb temperature. SafetyCool models are designed to also operate effectively at higher ambients.

At 120°F (49°C) outside dry bulb temperature the cooling capacity is reduced approximately 22 percent.

SEE CONTINUED FOR OPTIONS AND ACCESSORIES



**SCIENTIFIC
SYSTEMS
LLC**



EXPLOSION PROOF AIR CONDITIONERS

Schedule "A"

(Continued from Other Side)

Economy E-Series^(1,2,3)

COOLING ONLY, 60 Hz, Class I, Groups A, B, C and D, Division 2

MODEL	COOL ⁽⁴⁾	VAC	AMPS	HEIGHT ⁽⁵⁾	WIDTH ⁽⁵⁾	DEPTH ⁽⁵⁾	WEIGHT ⁽⁷⁾
	BTUH			INCHES	INCHES	INCHES	NETLBS
WACX-E-1402	15,000/15,000	208/230	8.5/7.8	15-15/16	25-15/16	27-3/8	140
WACX-E-1902	19,500/19,800	208/230	10.4/9.8	17-15/16	25-15/16	27-3/8	166

OPTIONS and ACCESSORIES

-LAC	Low Ambient Controls for operating air conditioner at outdoor ambient temperatures below 55°F (13°C) ..
-BG	BLYGOLD Polual spray applied coating on condenser and evaporator coils, additional
-ECB	BLYGOLD Polual spray applied coil coating, other metal epoxy primed and coated, additional
-SH	Cover Housing, Corrosion Resistant Type 316 stainless steel
-MBS	Mounting Bracket Set, stainless steel, for extra strong support of SafetyCool cabinets
-EXP	Export Crate, for rough handling, choice of sea or air crate, specif ⁽⁷⁾
-RC	Remote Controls, thermostat and selector switch
-SPS	Spare Parts Kit ⁽⁶⁾ (thermostat, selector switch, run capacitor)
-CC	SaveCoil 101 Dip applied and baked coating on condenser and evaporator coils, additional
-EC	SaveCoil 101 Dip applied and baked coil coating, other metal epoxy primed and coated, additional
-CuCu	Condenser and Evaporator Coil Copper Tubes with Coper Fins for 8,400 btu thru 24,000 btu, additional .
-CuCu	Condenser and Evaporator Coil Copper Tubes with Coper Fins for 28,000 btu and 35,000 btu, additional

(1) UL and UL C(anada) listed. Maximum temperature rating is T3C, 320°F (160°C).

(2) E - Series have a 1-Year Limited Warranty.

(3) Not available with Options "-BG, ECB, -CC, "-EC", "-RC" or "-SPS".

(4) At 230 Volts

(5) **Request certified drawings before making cutouts.** Dimensions subject to change.

(6) Kit available for shipment **with** air conditioner only. Use numbers from Parts List for replacement parts ordered later.

(7) Add 35 lbs. for cardboard, 55 to 70 lbs. for air crate, or 110 to 170 lbs. for sea crate.

(8) For Group B add "/RC/IB2" to model number and add US\$ 1,322. to price for models up through 12,000 BTUH and add US\$ 1,939. for models rated higher than 12,000 BTUH. Control box is external.

We reserve the right to modify and improve our products. Prices and specifications are subject to change!

3-YEAR LIMITED WARRANTY ⁽²⁾

SafetyCool air conditioners are warranted to be free of defects in materials and workmanship for a period of three (3) years. During the first twelve months following date of shipment Scientific Systems will repair or replace any defective component at no charge. For the next two years Scientific Systems will repair or replace any non-functional item or items for a total cost not to exceed (50) percent of the list price of an equivalent model air conditioner. Items returned for repair or replacement must be shipped to factory with freight prepaid and will be returned freight collect. This warranty applies to the original, registered customer only. Items damaged during shipment or as a result of improper handling or use are specifically excluded under this warranty.

SEE CONTINUED FOR OPTIONS AND ACCESSORIES



**SCIENTIFIC
SYSTEMS
LLC**



EXPLOSION PROOF AIR CONDITIONERS

Schedule "A"

SafetyCool Window or Thru-Wall Air Conditioners 50 Hertz

COOLING ONLY, 50 Hz,^(1,4) NEC Class I, Groups B⁽⁸⁾, C and D, Division 2

MODEL	COOL ⁽³⁾	VAC	FUSE	HEIGHT ⁽⁵⁾	WIDTH ⁽⁵⁾	DEPTH ⁽⁵⁾	WEIGHT ⁽⁶⁾
	BTUH		AMPS	INCHES	INCHES	INCHES	NET LBS
WACX-50-1234	12,000	220/240	15	15-0/0	23-5/8	22-1/16	125
WACX-50-1804	18,000	220/240	15	16-15/16	26-0/0	30-3/8	150
WACX-50-2404	24,000	220/240	20	16-15/16	26-0/0	30-3/8	160

COOLING AND ELECTRIC HEAT,^(1,2,) 50⁽⁴⁾ Hz, NEC Class I, Group B⁽⁸⁾ and D, Division 2

MODEL	COOL ⁽³⁾⁽⁷⁾	HEAT ⁽³⁾	VAC	FUSE	HEIGHT ⁽⁵⁾	WIDTH ⁽⁵⁾	DEPTH ⁽⁵⁾	WEIGHT
	BTUH	BTUH		AMPS	INCHES	INCHES	INCHES	NET LBS
WACX-50-1234-EH-0968	12,000	9,596	220/240	20	15-0/0	23-5/8	42-3/4	285
WACX-50-1234-EH-1398	12,000	13,435	220/240	25	15-0/0	23-5/8	42-3/4	285
WACX-50-1804-EH-1291	18,000	11,516	220/240	20	16-15/16	26-0/0	42-3/4	305
WACX-50-1804-EH-1936	18,000	19,193	220/240	30	16-15/16	26-0/0	42-3/4	305
WACX-50-2404-EH-1828	24,000	17,273	220/240	30	16-15/16	26-0/0	42-3/4	320
WACX-50-2404-EH-2366	24,000	23,031	220/240	35	16-15/16	26-0/0	42-3/4	320

- (1) Manufacturer certified, not CSA listed. Heaters rated for NEC Identification Code T2A. Suitable for use in hazardous locations containing compounds with ignition temperatures of 536°F (280°C) or higher.
- (2) Free-standing, UL or CSA listed Electric Heaters are also available. These are rated for Class I, Groups C or D and Class II, Groups E, F, and G with NEC Identification Numbers T2A, T2B or T3B. (Bulletin EXHE1PSS).
- (3) 220/240 models are rated at 240 Volts. Deduct 16% for heater rating at 208 Volts.
- (4) For 60 Hz models request Price List SAEX6PRL.
- (5) **Request certified drawings before making cutouts!** Dimensions subject to change.
- (6) Add 35 lbs. for cardboard domestic, 55 to 70 lbs. for air crate, or 110 to 170 lbs. for sea crate.
- (7) Rated at 95°F (35°C) dry bulb temperature. SafetyCool models are designed to also operate effectively at higher ambients. At 120°F (49°C) outside dry bulb temperature the cooling capacity is reduced approximately 22 percent.
- (8) For Group B add "/RC/IB2" to model number and add US\$ 1,322. to price for models up through 12,000 BTUH and add US\$ 1,939. for models rated higher than 12,000 BTUH. Control box is external.



**SCIENTIFIC
SYSTEMS
LLC**

SEE CONTINUED FOR OPTIONS AND ACCESSORIES



EXPLOSION PROOF AIR CONDITIONERS

Schedule "A"

(Continued from other Side)

OPTIONS AND ACCESSORIES

-LAC	Low Ambient Controls for operating air conditioner at outdoor ambient temperatures below 55°F (13°C) .
-BG	BLYGOLD Polual spray applied coating on condenser and evaporator coils, additional
-ECB	BLYGOLD Polual spray applied coil coating, other metal epoxy primed and coated, additional
-SH	Cover Housing, Corrosion Resistant Type 316 stainless steel
-MBS	Mounting Bracket Set, stainless steel, for extra strong support of SafetyCool cabinets
-EXP	Export Crate, for rough handling, choice of sea or air crate, specify ⁽²⁾
-RC	Remote Controls, thermostat and selector switch
-SPS	Spare Parts Kit ⁽¹⁾ (thermostat, selector switch, run capacitor)
-CC	SaveCoil 101 Dip applied and baked coating on condenser and evaporator coils, additional
-EC	SaveCoil 101 Dip applied and baked coil coating, other metal epoxy primed and coated, additional
-CuCu	Condenser and Evaporator Coil Copper Tubes with Coper Fins for 8,400 btu thru 24,000 btu, additional .
-CuCu	Condenser and Evaporator Coil Copper Tubes with Coper Fins for 28,000 btu and 35,000 btu, additional

(1) Kit available for shipment **with** air conditioner only. Use numbers from Parts List for replacement parts ordered later.

(2) Add 35 lbs. for cardboard, 55 to 70 lbs. for air crate, or 110 to 170 lbs. for sea crate.

(3) For Group B add "/RC/IB2" to model number and add US\$ 1,322. to price for models up through 12,000 BTUH and add US\$ 1,939. for models rated higher than 12,000 BTUH. Control box is external.

We reserve the right to modify and improve our products. Prices and specifications are subject to change!

3-YEAR LIMITED WARRANTY

SafetyCool air conditioners are warranted to be free of defects in materials and workmanship for a period of three (3) years. During the first twelve months following date of shipment Scientific Systems will repair or replace any defective component at no charge. For the next two years Scientific Systems will repair or replace any non-functional item or items for a total cost not to exceed (50) percent of the list price of an equivalent model air conditioner. Items returned for repair or replacement must be shipped to factory with freight prepaid and will be returned freight collect. This warranty applies to the original, registered customer only. Items damaged during shipment or as a result of improper handling or use are specifically excluded under this warranty.



**SCIENTIFIC
SYSTEMS**
LLC

SEE CONTINUED FOR OPTIONS AND



EXPLOSION PROOF AIR CONDITIONERS

HazardCool Window or Thru-Wall Air Conditioners 60 Hertz

Schedule "A"

COOLING⁽¹⁾ ONLY, 60 Hz⁽²⁾, Class I Groups C & D, Class II Group F & G⁽⁵⁾, Divisions 1 and 2

Model	Cooling ⁽⁶⁾	VAC	Fuse	Height ^(3,4)	Width ⁽⁴⁾	Depth ^(3,4)	Weight ⁽⁸⁾
	BTUH		AMPERES	INCHES	INCHES	INCHES	NET LBS
HC-WACX-0753	8,400	115	20	24-1/2	25-15/16	27-3/8	210
HC-WACX-1103	11,800	115	25	24-1/2	25-15/16	27-3/8	215
HC-WACX-1203	11,900/12,100	208/230	15	24-1/2	25-15/16	27-3/8	255
HC-WACX-1803	17,300/17,500	208/230	20	26-3/4	25-15/16	27-3/8	275
HC-WACX-2403	23,500/23,500	208/230	25	26-3/4	25-15/16	27-3/8	300
HC-WACX-2753	27,700/28,000	208/230	30	28-3/4	28	33-5/8	310
HC-WACX-3503	35,700/36,000	208/230	35	28-3/4	28	33-5/8	310

OPTIONS and ACCESSORIES

-BG	BLYGOLD PoluAL spray applied coil coating on condenser and evaporator coils, additional
-ECB	BLYGOLD PoluAL spray applied coil coating, other metal epoxy primed and coated, additional
-SH	Cover Housing, Corrosion Resistant Type 316 stainless steel
-MBS	Mounting Bracket Set, Type 316 SS, for corrosion resistant support of HazardCool Air Conditioners
-EXP	Export Crate, heavy duty, for rough handling air or sea shipment specify ⁽⁸⁾
-SPH	Spare Parts Kit ⁽⁷⁾ (thermostat, selector switch, relays (2), fuses, belt, run capacitor)
-CC	SaveCoil 31 Dip applied and baked coating on condenser and evaporator coils, additional
-EC	SaveCoil 31 Dip applied and baked coil coating, other metal epoxy primed and coated, additional
-CuCu	Condenser and Evaporator Coil Copper Tubes with Coper Fins for 8,400 btu thru 24,000 btu, additional ...
-CuCu	Condenser and Evaporator Coil Copper Tubes with Coper Fins for 28,000 btu and 35,000 btu, additional ..

(1) UL and FM Approved Electric Heaters with NEC Identification Numbers T1 through T3B are available as separate units for Class I, Group B, C or D and Class II, Group E, F or G. Request Product Specification EXHE1PSS.

(2) For 50 Hz models request Price List HAEX5PRL.

(3) Dimensions of explosion proof box not included. See Engineering Data Sheet.

(4) **Request certified drawings before making cutouts.** Dimensions subject to change.

(5) **All listed models are CSA certified for use under NEC Class I, Groups C and D and Class II, Groups F and G, Divisions 1 and 2.**

For Class I, Group B and Class II, Group E contact factory.

(6) Rated at 95°F (35°C) dry bulb temperature, HazardCool models are designed to also operate at higher ambients. At 120°F (49°C) the cooling capacity is reduced approximately 22 percent.

(7) Kit is available with initial air conditioner order only. Use numbers from Parts List when ordering parts at later date.

(8) Sea crate weight 195 to 230 lbs. Air crate 90 to 120 lbs.

We reserve the right to modify and improve our products. Prices and specifications are subject to change!

3-YEAR LIMITED WARRANTY

HazardCool air conditioners are warranted to be free of defects in materials and workmanship for a period of three (3) years. During the first twelve months following the date of shipment Scientific Systems will repair or replace any defective component at no charge. For the next two years Scientific Systems will repair or replace any non-functional item or items for a total cost not to exceed (50) percent of the list price of an equivalent model air conditioner. Items for repair or replacement must be shipped to factory with freight prepaid and will be returned freight collect. This warranty applies to the original, registered customer only. Items damaged during shipment or as a result of improper handling or use are specifically excluded from this warranty.



**SCIENTIFIC
SYSTEMS
LLC**

SEE CONTINUED FOR OPTIONS AND



HazardCool Window or Thru-Wall Air Conditioners 50 Hertz

COOLING⁽¹⁾ ONLY, 50 Hz⁽²⁾, Class I Groups C & D, Class II Group F & G⁽⁵⁾, Divisions 1 and 2

Model	Cooling ^{(6),(7)}	VAC	Fuse	Height ^(3,8)	Width ⁽³⁾	Depth ^(3,8)	Weight ⁽⁴⁾
	BTUH		AMPERES	INCHES	INCHES	INCHES	NET LBS
HC-WACX-50-1234	12,000	220/240	15	24-1/2	25-15/16	27-3/8	255
HC-WACX-50-1804	18,000	220/240	20	26-3/4	25-15/16	27-3/8	275
HC-WACX-50-2404	24,000	220/240	25	26-3/4	25-15/16	27-3/8	275

OPTIONS and ACCESSORIES

-BG	BLYGOLD PoluAL spray applied coil coating on condenser and evaporator coils, additional
-ECB	BLYGOLD PoluAL spray applied coil coating, other metal epoxy primed and coated, additional
-SH	Cover Housing, Corrosion Resistant Type 316 stainless steel
-MBS	Mounting Bracket Set, Type 316 SS, for corrosion resistant support of HazardCool Air Conditioners
-EXP	Export Crate, heavy duty, for rough handling air or sea shipment specify ⁽⁸⁾
-SPH	Spare Parts Kit ⁽⁷⁾ (thermostat, selector switch, relays (2), fuses, belt, run capacitor)
-CC	SaveCoil 31 Dip applied and baked coating on condenser and evaporator coils, additional
-EC	SaveCoil 31 Dip applied and baked coil coating, other metal epoxy primed and coated, additional
-CuCu	Condenser and Evaporator Coil Copper Tubes with Coper Fins for 8,400 btu thru 24,000 btu, additional .
-CuCu	Condenser and Evaporator Coil Copper Tubes with Coper Fins for 28,000 btu and 35,000 btu, additional

- (1) UL and FM Approved Electric Heaters with NEC Identification Numbers T1 through T3B are available as separate units for Class I, Group B, C or D and Class II, Group E, F or G. Request Product Specification EXHE1PSS.
- (2) For 60 Hz models request Price List HAEX6PRL.
- (3) Dimensions of explosion proof box not included. See Engineering Data Sheet.
- (4) **Request certified drawings before making cutouts.** Dimensions subject to change.
- (5) **All listed models are CSA certified for use under NEC Class I, Groups C and D and Class II, Groups F and G, Divisions 1 and 2.**
For Class I, Group B and Class II, Group E contact factory.
- (6) Rated at 95°F (35°C) dry bulb temperature, HazardCool models are designed to also operate at higher ambients. At 120°F (49°C) the cooling capacity is reduced approximately 22 percent.
- (7) Kit is available with initial air conditioner order only. Use numbers from Parts List when ordering parts at later date.
- (8) Sea crate weight 195 to 230 lbs. Air crate 90 to 120 lbs.

We reserve the right to modify and improve our products. Prices and specifications are subject to change!

3-YEAR LIMITED WARRANTY

HazardCool air conditioners are warranted to be free of defects in materials and workmanship for a period of three (3) years. During the first twelve months following the date of shipment Scientific Systems will repair or replace any defective component at no charge. For the next two years Scientific Systems will repair or replace any non-functional item or items for a total cost not to exceed (50) percent of the list price of an equivalent model air conditioner. Items for repair or replacement must be shipped to factory with freight prepaid and will be returned freight collect. This warranty applies to the original, registered customer only. Items damaged during shipment or as a result of improper handling or use are specifically excluded from this warranty.

