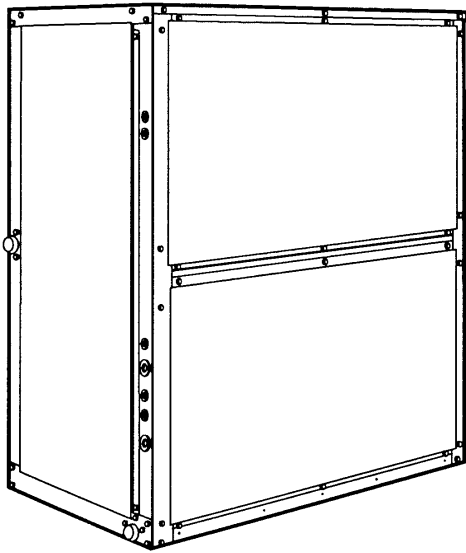


ACCESSORY USAGE GUIDE FOR FAS 6 to 30 TONS

FAS DIRECT EXPANSION PACKAGED AIR-HANDLING UNITS 6, 7.5, 10, 12.5, 15, 20, 25 AND 30 TONS

The FAS units are completely packaged direct expansion air-handling units offering the ultimate in installation ease and flexibility. Combined with ICP's CAS Series condensing units these packaged air handling units offer system capacities from 6 up to 30 tons. These units may be installed in either the vertical or horizontal configuration with no modifications. Powerful fan systems allow easy adaptation to existing ductwork. Heating capability is provided by electric heaters, hot water coils or steam coils.



FAS 6 TO 10 TON CHASSIS SHOWN



STANDARD FEATURES

- R-410A HFC refrigerant
- Cleanable insulation treated with an anti-microbial agent
- Two sloped condensate pans on each unit for horizontal or vertical applications
- 2 inch filters
- Powerful belt-driven forward curved fans
- Factory-installed fan motor and contactor
- Refrigerant metering devices (TXVs) - factory installed
- Single refrigerant circuit 072 and 091 sizes (6 and 7.5 ton) dual refrigerant circuit on 120-336 sizes (10-30 ton). Dual circuit can be field modified for use on single circuit condensers
- Easy maintenance - removal of a single panel allows access to virtually all components
- Single blower on 6 to 10 ton units; dual blower on 12.5 to 30 ton units
- Optional 2-speed indoor fan with VFD controller (072-336 sizes)
- 24-volt terminal block for control wiring connection
- Standard one year warranty

ACCESSORY USAGE GUIDE FOR FAS 6 to 30 TONS

FAS R-410A SPLIT SYSTEM - AIR HANDLER UNIT - MODEL NUMBER IDENTIFICATION GUIDE

Position No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14			
Example:	F	A	S	0	7	2	K	A	A	A	0	A	0	A			
F = Air Handler		TYPE															
A = Air Conditioner																	
S = Standard ASHRAE 90.1 Efficiency																	
072 = 72,000 BTUH = 6 tons																	
091 = 90,000 BTUH = 7.5 tons																	
120 = 120,000 BTUH = 10 tons																	
150 = 150,000 BTUH = 12.5 tons																	
180 = 180,000 BTUH = 15 tons																	
240 = 240,000 BTUH = 20 tons																	
300 = 300,000 BTUH = 25 tons																	
336 = 360,000 BTUH = 30 tons		NOMINAL COOLING CAPACITY															
K = 208/230-1-60																	
L = 460-3-60																	
H = 208/230-3-60																	
M = 208/230/3/60 / 460-3-60																	
S = 575-3-60		VOLTAGE															
A = Standard Static-Standard Efficiency Motor / Standard Drive																	
B = High (Alternate) Static Motor -Standard Efficiency / High Drive																	
D = Standard Static- High Efficiency Motor / Standard Drive																	
E = High (Alternate) Static Motor - High Efficiency / High Drive		MOTOR/DRIVE															
A = Standard Al Fin / Copper Tube		Coil Type															
A = Future Use																	
0 = Single Speed Indoor Fan Motor																	
2 = Two Speed Indoor fan Motor Controller (VFD)		Fan Speed Controller															
A = Standard Un-Painted																	
B = Painted - Gray		Painted Cabinet															
0 = Future Use																	
A = Standard																	

* Single-phase 072 and 091 units designate standard motor and high static drive.

† All FAS072-150 units with a "M" voltage designation are triple voltage; i.e., 208-230/460-3-60.
 Size FAS180 is also triple voltage in the "M" configuration unless the High Static motor option is used.
 "M" voltage is not available on 2-speed indoor fan motor option.

ACCESSORY USAGE GUIDE FOR FAS 6 to 30 TONS

FIELD-INSTALLED ACCESSORIES

FAS FAN COIL ACCESSORY ELECTRIC HEATERS*

ORDERING NUMBER	DESCRIPTION	NOMINAL CAPACITY (kW)	USED WITH SIZES
(240 V - 3 PHASE - 60 Hz)			
CAELHEAT001A00	5.0 kW, 240-3-60 Electric Heater	5	072, 091, 120
CAELHEAT004A00	10.0 kW, 240-3-60 Electric Heater	10	072, 091, 120
CAELHEAT007A00	15.0 kW, 240-3-60 Electric Heater	15	072, 091, 120
CAELHEAT010A00	25.0 kW, 240-3-60 Electric Heater	25	072, 091, 120
CAELHEAT013A00	35.0 kW, 240-3-60 Electric Heater	35	091, 120
CAELHEAT016A00	10.0 kW, 240-3-60 Electric Heater	10	150, 180, 240
CAELHEAT019A00	20.0 kW, 240-3-60 Electric Heater	20	150, 180, 240
CAELHEAT022A00	30.0 kW, 240-3-60 Electric Heater	30	150, 180, 240
CAELHEAT025A00	50.0 kW, 240-3-60 Electric Heater	50	180, 240
CAELHEAT028A00	20.0 kW, 240-3-60 Electric Heater	20	300, 336
CAELHEAT031A00	40.0 kW, 240-3-60 Electric Heater	40	300, 336
CAELHEAT034A00	50.0 kW, 240-3-60 Electric Heater	50	300, 336
CAELHEAT037A00	70.0 kW, 240-3-60 Electric Heater	70	300, 336
(480 V - 3 PHASE - 60 Hz)			
CAELHEAT002A00	5.0 kW, 480-3-60 Electric Heater	5	072, 091, 120
CAELHEAT005A00	10.0 kW, 480-3-60 Electric Heater	10	072, 091, 120
CAELHEAT008A00	15.0 kW, 480-3-60 Electric Heater	15	072, 091, 120
CAELHEAT011A00	25.0 kW, 480-3-60 Electric Heater	25	072, 091, 120
CAELHEAT014A00	35.0 kW, 480-3-60 Electric Heater	35	091, 120
CAELHEAT017A00	10.0 kW, 480-3-60 Electric Heater	10	150, 180, 240
CAELHEAT020A00	20.0 kW, 480-3-60 Electric Heater	20	150, 180, 240
CAELHEAT023A00	30.0 kW, 480-3-60 Electric Heater	30	150, 180, 240
CAELHEAT026A00	50.0 kW, 480-3-60 Electric Heater	50	180, 240
CAELHEAT029A00	20.0 kW, 480-3-60 Electric Heater	20	300, 336
CAELHEAT032A00	40.0 kW, 480-3-60 Electric Heater	40	300, 336
CAELHEAT035A00	50.0 kW, 480-3-60 Electric Heater	50	300, 336
CAELHEAT038A00	70.0 kW, 480-3-60 Electric Heater	70	300, 336

ACCESSORY USAGE GUIDE FOR FAS 6 to 30 TONS

FIELD-INSTALLED ACCESSORIES (cont)

FAS FAN COIL ACCESSORY ELECTRIC HEATERS* (cont)

(575 V - 3 PHASE - 60 Hz)

ORDERING NUMBER	DESCRIPTION	NOMINAL CAPACITY (kW)	USED WITH SIZES
CAELHEAT003A00	5.0 kW, 575-3-60 Electric Heater	5	072, 091, 120
CAELHEAT006A00	10.0 kW, 575-3-60 Electric Heater	10	072, 091, 120
CAELHEAT009A00	15.0 kW, 575-3-60 Electric Heater	15	072, 091, 120
CAELHEAT012A00	25.0 kW, 575-3-60 Electric Heater	25	072, 091, 120
CAELHEAT015A00	35.0 kW, 575-3-60 Electric Heater	35	091, 120
CAELHEAT018A00	10.0 kW, 575-3-60 Electric Heater	10	150, 180, 240
CAELHEAT021A00	20.0 kW, 575-3-60 Electric Heater	20	150, 180, 240
CAELHEAT024A00	30.0 kW, 575-3-60 Electric Heater	30	150, 180, 240
CAELHEAT027A00	50.0 kW, 575-3-60 Electric Heater	50	180, 240
CAELHEAT030A00	20.0 kW, 575-3-60 Electric Heater	20	300, 336
CAELHEAT033A00	40.0 kW, 575-3-60 Electric Heater	40	300, 336
CAELHEAT036A00	50.0 kW, 575-3-60 Electric Heater	50	300, 336
CAELHEAT039A00	70.0 kW, 575-3-60 Electric Heater	70	300, 336

* Electric heaters tested at a maximum E.S.P. of 1.9 inch.

NOTE: App. shipping weight for CAELHEAT001A00 – CAELHEAT015A00 is 55 lbs. ea.

App. shipping weight for CAELHEAT016A00 – CAELHEAT027A00 is 60 lbs. ea.

App. shipping weight for CAELHEAT028A00 – CAELHEAT039A00 is 75 lbs. ea.

ACCESSORY USAGE GUIDE FOR FAS 6 to 30 TONS

FIELD-INSTALLED ACCESSORIES (cont)

FAS FAN COIL (072-120 sizes) ACCESSORIES

ORDERING MODEL NUMBER	DESCRIPTION	USE WITH SIZE
CAECOMZR001B00†	Economizer – temperature dry bulb controlled - Standard Leak design with gear driven damper blades and W7212 controller ‡ (Use --HH--57AC-078 for enthalpy control)	072-120
CAECOMZR008A01	Economizer - temperature dry bulb controlled - Ultra LOW LEAK - EconoMi\$er X with solid-state W7220 controller, gear-driven, modulating damper, spring return actuator. Supply and outdoor air sensors, and CO2 sensor compatible, for use in electro mechanical controls only. Also includes return and outside air damper leakage that meets Title 24 section 140.4 requirements. Controller meets California Title 24 Section 120.2 Fault Detection and Diagnostic (FDD) requirements. Also meets AMCA Class 1A economizer damper test standards and labeling.	072-120
--HH--57AC-081	Enthalpy Control for W7220 Controller only (One required for single enthalpy, two required for different enthalpy)	072-120
--HH--57AC-078	Accusensor II Enthalpy control upgrade	072-120
CAHWCOIL001A00	Hot Water Coil (2 row)	072-120
CAOVRFLW001A00	Condensate Overflow Switch Assembly	072-120
CAPLENUM001A00 ‡	Discharge Plenum	072-120
CAPLENUM004A00 ‡	Discharge Plenum - Painted	072-120
CARAGRIL001A00	Return Air Grille	072-120
CARAGRIL004A00	Return Air Grille - Painted	072-120
CASTCOIL001A00	Steam Coil (1 row)	072-120
CASUBASE001A00	Floor Mount Base (Subbase)	072-120
CASUBASE003A00	Floor Mount Base (Subbase) - Painted	072-120
CASUSPEN001A00	Overhead Suspension Brackets	072-120

† This accessory replaces CAECOMZR001A00 which used a linkage damper blade design and W7459 controller. The CAECOMZR001A00 can be used if inventory is available.

‡ Discharge plenums are shipped knocked down and require field assembly. **Cannot be used with electric heat or horizontal application.**

ACCESSORY USAGE GUIDE FOR FAS 6 to 30 TONS

FIELD-INSTALLED ACCESSORIES (cont)

FAS FAN COIL (150 - 240 sizes) ACCESSORIES

ORDERING MODEL NUMBER	DESCRIPTION	USE WITH SIZE
CAECOMZR002B00†	Economizer -- temperature dry bulb controlled - Standard Leak design with gear driven damper blades and W7212 controller ‡ (Use --HH--57AC-078 for enthalpy control)	150-240
CAECOMZR010A01	Economizer - temperature dry bulb controlled - Ultra LOW LEAK - EconoMi\$er X with solid-state W7220 controller, gear-driven, modulating damper, spring return actuator. Supply and outdoor air sensors, and CO2 sensor compatible, for use in electro mechanical controls only. Also includes return and outside air damper leakage that meets Title 24 section 140.4 requirements. Controller meets California Title 24 Section 120.2 Fault Detection and Diagnostic (FDD) requirements. Also meets AMCA Class 1A economizer damper test standards and labeling.	150-240
--HH--57AC-081	Enthalpy Control for W7220 Controller only (One required for single enthalpy, two required for different enthalpy)	150-240
--HH--57AC-078	Accusensor II Enthalpy control upgrade	150-240
CAHWCOIL002A00	Hot Water Coil (2 row)	150-240
CAOVRFLW001A00	Condensate Overflow Switch Assembly	150-240
CAPLENUM002A00 ‡	Discharge Plenum	150-240
CAPLENUM005A00 ‡	Discharge Plenum - Painted	150-240
CARAGRIL002A00	Return Air Grille	150-240
CARAGRIL005A00	Return Air Grille - Painted	150-240
CASTCOIL002A00	Steam Coil (1 row)	150-240
CASUBASE001A00	Floor Mount Base (Subbase)	150-240
CASUBASE003A00	Floor Mount Base (Subbase) - Painted	150-240
CASUSPEN001A00	Overhead Suspension Brackets	150-240

NOTE: Accessories are unpainted unless noted otherwise in the description.

† This accessory replaces CAECOMZR002A00 which used a linkage damper blade design and W7459 controller. The CAECOMZR001A00 can be used if inventory is available.

‡ Discharge plenums are shipped knocked down and require field assembly. Cannot be used with electric heat, or horizontal applications.

ACCESSORY USAGE GUIDE FOR FAS 6 to 30 TONS

FIELD-INSTALLED ACCESSORIES (cont)

FAS FAN COIL (300, 336 Sizes) ACCESSORIES

ORDERING MODEL NUMBER	DESCRIPTION	USE WITH SIZE
CAECOMZR003B00†	Economizer -- temperature dry bulb controlled - Standard Leak design with gear driven damper blades and W7212 controller ‡ (Use --HH--57AC-078 for enthalpy control)	300-336
CAECOMZR012A01	Economizer - temperature dry bulb controlled - Ultra LOW LEAK - EconoMi\$er X with solid-state W7220 controller, gear-driven, modulating damper, spring return actuator. Supply and outdoor air sensors, and CO2 sensor compatible, for use in electro mechanical controls only. Also includes return and outside air damper leakage that meets Title 24 section 140.4 requirements. Controller meets California Title 24 Section 120.2 Fault Detection and Diagnostic (FDD) requirements. Also meets AMCA Class 1A economizer damper test standards and labeling.	300-336
--HH--57AC-081	Enthalpy Control for W7220 Controller only (One required for single enthalpy, two required for different enthalpy)	300-336
--HH--57AC-078	Accusensor II Enthalpy control upgrade	300-336
CAHWCOIL003A00	Hot Water Coil (2 row)	300-336
CAOVRFLW001A00	Condensate Overflow Switch Assembly	300-336
CAPLENUM003A00	Discharge Plenum	300-336
CAPLENUM006A00	Discharge Plenum – Painted	300-336
CARAGRIL003A00	Return Air Grille	300-336
CARAGRIL006A00	Return Air Grille – Painted	300-336
CASTCOIL003A00	Steam Coil (1 row)	300-336
CASUBASE002A00	Floor Mount Base (Subbase)	300-336
CASUBASE004A00	Floor Mount Base (Subbase) – Painted	300-336
CASUSPEN001A00	Overhead Suspension Brackets	300-336

NOTE: Accessories are unpainted unless noted otherwise in the description.

† This accessory replaces CAECOMZR003A00 which used a linkage damper blade design and W7459 controller. The CAECOMZR003A00 can be used if inventory is available.

‡ Discharge plenums are shipped knocked down and require field assembly. Cannot be used with electric heat, or horizontal applications.

ACCESSORIES: RELAY PACKAGE

ORDERING MODEL NUMBER	DESCRIPTION	SHIPPING WT. (lbs)	USED ON
CATRANRY001A00	Transformer Relay Package - Contains 200/230/460 to 24-volt transformer, indoor fan and solenoid valve relays with wiring and quick connect terminals. Formerly 38AE-900---001.	4	Recommended for 24-volt thermostat applications when additional VA is required.

ACCESSORIES: 2-SPEED (VFD) DISPLAY KIT

ORDERING MODEL NUMBER	DESCRIPTION	SHIPPING WT. (lbs)	USED ON
CRDISKIT001A00	2 Speed VFD display kit - Provides the field capability to set up points and troubleshooting codes on the VFD controller. Kit includes display and cable. If preferred, kit can be used for any associated unit with VFD.	4	All 2 Speed VFD Controllers