

InPac 600 Series

Fully configurable severe duty and explosion proof
HVAC and building pressurization systems
2–5 ton :: 7.0–17.5 kW



Features and Benefits

Built for critical applications

- Two-stages of cooling allows for more precise cooling as well as a 50% refrigeration backup in the event of a leak or component failure
- All-in-one design to allow a single point of connection
- 16-gauge cabinet construction for use in rugged, industrial applications
- Modular design allows improved maintenance and spare parts availability
- Form-C dry contacts for alarm outputs allow remote monitoring
- Standard motors are totally-enclosed and rated for Class 1 Div 2
- UL 508A Listed electrical panels for safety
- Fully CSA certified to UL 1995 (general purpose) and 1203 (hazloc) standards
- Industry standard voltage configurations, including: 480V 3ph 60Hz; 575V 3ph 60Hz; 380V 3ph 50Hz

Options and Accessories

- Built in NFPA-496 compliant building purge & pressurization
- Chemical and/or high efficiency particulate filtration
- Electric heat from 10 kW – 40kW
- Air quality monitoring for explosive, toxic, or corrosive gases
- Corrosion resistant coil coatings
- Corrosion resistant condenser section
- Low ambient controls, down to -70°F (-55°C)
- Fresh air stack packages
- Multiple unit control

Designed to allow full environmental control of your building.

Specific Systems InPac units are engineered and proven to stand up to the rigors and harsh conditions of corrosive and hazardous environments. The InPac line is built to demanding industrial and military specifications and features corrosion resistant coatings and inherent redundancy.

Our InPac units are engineered from the ground up to make your job easier. In fact, our modular design eliminates the need for the integration of systems from multiple vendors. Instead, using a Specific Systems InPac HVAC allows for a single point of connection to perform all of the functions otherwise requiring multiple types of units.

InPac systems are custom-engineered and built-to-order for each customer using a time-proven assembly method. Standard unit cabinets are manufactured of 16-gauge galvanized steel with all-welded construction. The completed cabinet is painted with a finish to help fight corrosion. Standard fan module consists of a motor and direct drive blowers. If any auxiliary (stand-by) fan is needed, it can be provided along with the necessary controls to automatically purge and pressurize the building. The auxiliary fan serves secondarily as a redundant fan should a failure occur to the primary fan.

Starting with our time-proven industrial DX air conditioning system, you can include many options, including those listed at left. This all-in-one design allows quicker and more efficient integration into your structure. Form-C dry contacts for alarm outputs are standard, with full remote controls available through an optional BacNet or LonWorks compatible PLC.

InPac 600 Series

- Electrical Data
- Capacity Data
- Preliminary Dimensions

Model	CFM @ 0.50" S.P.		Nominal Capacity	
	60Hz	50Hz	60 Hz	50 Hz
624	1390	1160	24000	19920
636	1390	1160	36000	30000
648	2000	1667	48000	40000
660	2000	1667	60000	50000

Model	Refrigerant Capacity/Circuit	
	Standard	w/Receivers
624	4	11.5
636	4	11.5
648	4	11.5
660	4.3	12.5

Model	Total Cap. @ 60Hz, 80 DB / 67 WB Entering Evap.				
	75°F (24°C)	85°F (29°C)	95°F (35°C)	110°F (43°C)	120°F (49°C)
624	27000	25600	24200	21900	20400
636	50800	48200	45600	41300	68400
648	54000	51200	48400	43900	40900
660	70300	66900	63300	57800	53900

Model	Total Cap. @ 60Hz, 80 DB / 67 WB Entering Evap.				
	75°F (24°C)	85°F (29°C)	95°F (35°C)	110°F (43°C)	120°F (49°C)
624	7.90	7.50	7.10	6.45	6.00
636	14.90	14.15	13.35	12.10	11.25
648	15.85	15.00	14.20	12.90	12.00
660	20.60	19.60	18.60	16.95	15.80

Model	Sensible Cap. @ 60Hz, 80 DB / 67 WB Entering Evap.				
	75°F (24°C)	85°F (29°C)	95°F (35°C)	110°F (43°C)	120°F (49°C)
624	17800	17200	16600	15700	15200
636	30900	29800	28600	26800	25800
648	35600	34400	33300	31400	30400
660	45600	44100	42400	40100	38600

Model	Sensible Cap. @ 60Hz, 80 DB / 67 WB Entering Evap.				
	75°F (24°C)	85°F (29°C)	95°F (35°C)	110°F (43°C)	120°F (49°C)
624	5.25	5.05	4.85	4.60	4.50
636	9.01	8.75	8.40	7.85	7.50
648	10.45	10.10	9.75	9.20	8.95
660	13.40	12.95	12.45	11.80	11.30

Model	Total Cap. @ 60Hz, 80 DB / 61.8 WB Entering Evap.				
	75°F (24°C)	85°F (29°C)	95°F (35°C)	110°F (43°C)	120°F (49°C)
624	24600	23400	22000	20000	18700
636	46000	43700	41200	37300	34600
648	49300	46800	44100	40100	37500
660	64400	61200	58100	52900	49600

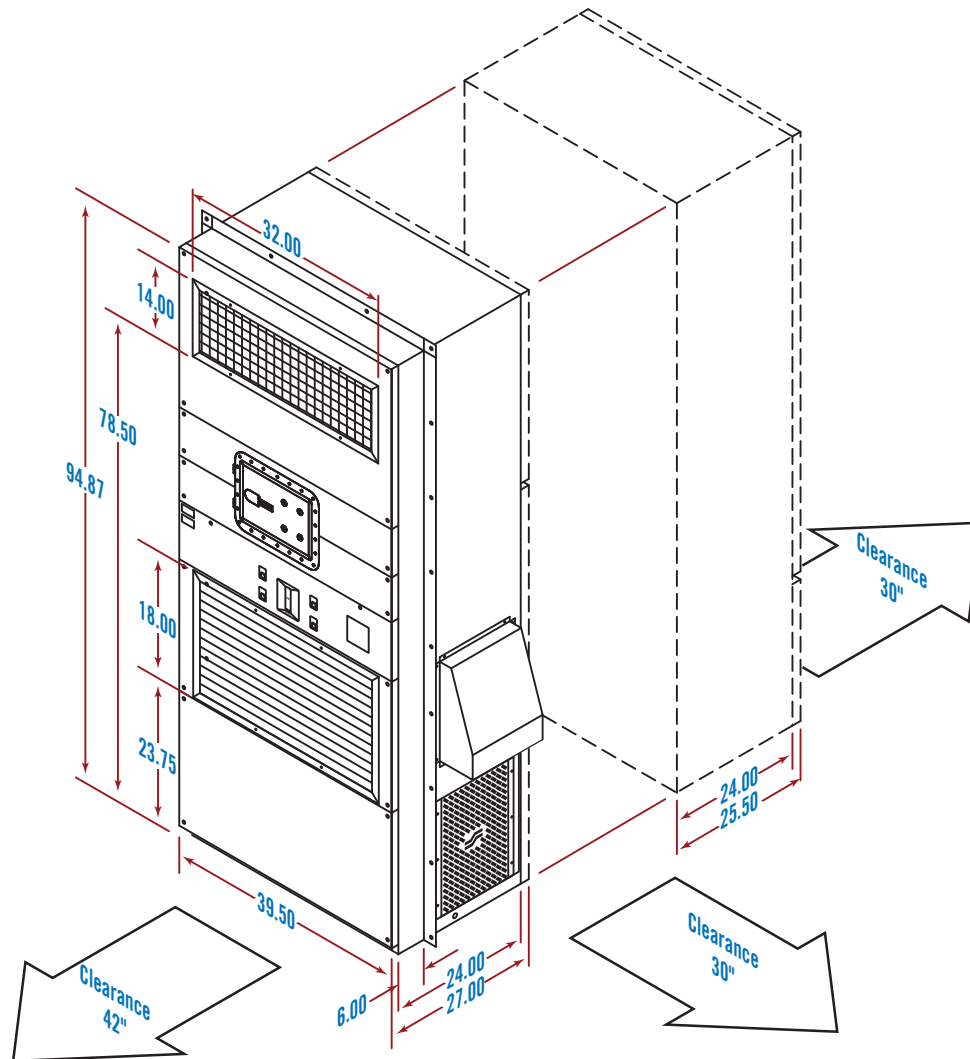
Model	Total Cap. @ 60Hz, 80 DB / 61.8 WB Entering Evap.				
	75°F (24°C)	85°F (29°C)	95°F (35°C)	110°F (43°C)	120°F (49°C)
624	7.25	6.90	6.50	5.90	5.50
636	13.50	12.80	12.10	10.95	10.15
648	14.50	13.75	12.95	11.75	11.00
660	18.90	17.95	17.00	15.50	14.55

Model	Sensible Cap. @ 60Hz, 80 DB / 61.8 WB Entering Evap.				
	75°F (24°C)	85°F (29°C)	95°F (35°C)	110°F (43°C)	120°F (49°C)
624	22000	21400	20900	19600	18700
636	37600	36500	35300	33400	32000
648	44100	42900	41500	39200	37500
660	56000	54400	52900	50100	48400

Model	Sensible Cap. @ 60Hz, 80 DB / 61.8 WB Entering Evap.				
	75°F (24°C)	85°F (29°C)	95°F (35°C)	110°F (43°C)	120°F (49°C)
624	6.45	6.30	6.10	5.75	5.50
636	11.00	10.70	11.35	9.80	9.40
648	12.90	12.60	12.20	11.50	11.00
660	16.40	16.00	15.50	14.70	14.20

InPac 600 Series

- Electrical Data
- Capacity Data
- Preliminary Dimensions



- Dimensions shown are representative of our standard vertical, through-the-wall explosion proof Class 1 Div 2 HVAC and pressurization system
- All dimensions should be considered preliminary, and this drawing should not be used as a final construction document
- Clearances are provided as standard for maintenance. Any required clearances should be confirmed with local regulations or statutes for electrical systems
- Electrical and capacity data provided in this document is accurate at the time of publishing, but Specific Systems reserves the right to modify components in future systems, thereby negating the accuracy of these numbers.
- Please verify all data with your sales representative and subsequent project engineer

MODEL 624		230/240V	460/480V	230/240V	415V	380V	575V
Electric Power		1Φ-60Hz	3Φ-60Hz	3Φ-60Hz	3Φ-50Hz	3Φ-50Hz	3Φ-60Hz
Evaporator Fan Motor FLA		5.7	2.5	5	2.2	2.2	2.0
Condenser Motor FLA		11.0	3.1	6.1	2.8	2.8	2.5
Compressor Motor RLA		8.3	5.1	6.1	5.1	5.1	3.3
Heat 20kW, Amps (Actual kW)		53.3 (20.1)	26.0 (21.6)	53.3 (20.6)	31.2 (22.4)	29.3 (18.8)	21.7 (21.6)
Heat 15kW, Amps (Actual kW)		37.8 (13.8)	18.5 (15.4)	37.3 (13.8)	22.5 (14.9)	24.9 (15.6)	15.5 (15.4)
Heat 10kW, Amps (Actual kW)		26.0 (10.3)	13.0 (10.8)	26.0 (10.3)	16.0 (11.2)	14.7 (9.4)	10.8 (10.8)
Total FLA, Cooling	w/o Auxiliary Fan	26.5	12.2	18.8	11.6	11.6	9.3
	w/Auxiliary Fan	32.25	14.7	23.8	13.8	13.8	11.3
10 kW Heat	MCA w/o Aux Fan	28.6	21.9	41.4	22.1	22.1	17.9
	MOP w/o Aux Fan	35.0	25.0	45.0	25.0	25.0	20.0
	MCA w/Aux Fan	34.3	21.9	46.4	24.3	24.3	19.9
	MOP w/Aux Fan	40.0	25.0	50.0	25.0	25.0	20.0
15 kW Heat	MCA w/o Aux Fan	—	29.2	55.2	33.9	33.9	23.7
	MOP w/o Aux Fan	—	30.0	60.0	35.0	35.0	25.0
	MCA w/Aux Fan	—	29.2	60.2	36.1	36.1	25.7
	MOP w/Aux Fan	—	30.0	70.0	40.0	40.0	30.0
20 kW Heat	MCA w/o Aux Fan	—	38.9	74.6	39.6	39.6	31.5
	MOP w/o Aux Fan	—	40.0	80.0	40.0	40.0	35.0
	MCA w/Aux Fan	—	38.9	79.6	41.8	41.8	33.5
	MOP w/Aux Fan	—	40.0	90.0	50.0	50.0	40.0
Operating Range		216V–253V	432V–506V	216V–253V	373V–456V	342V–418V	517V–600V

MODEL 636		230/240V	460/480V	230/240V	415V	380V	575V
Electric Power		1Φ-60Hz	3Φ-60Hz	3Φ-60Hz	3Φ-50Hz	3Φ-50Hz	3Φ-60Hz
Evaporator Fan Motor FLA		5.7	2.5	5	2.2	2.2	2.0
Condenser Motor FLA		11.0	3.1	6.1	2.8	2.8	2.5
Compressor Motor RLA		13.5	3.5	7.8	4.4	4.4	2.9
Heat 20kW, Amps (Actual kW)		53.3 (20.1)	26.0 (21.6)	53.3 (20.6)	31.2 (22.4)	29.3 (18.8)	21.7 (21.6)
Heat 15kW, Amps (Actual kW)		37.8 (13.8)	18.5 (15.4)	37.3 (13.8)	22.5 (14.9)	24.9 (15.6)	15.5 (15.4)
Heat 10kW, Amps (Actual kW)		26.0 (10.3)	13.0 (10.8)	26.0 (10.3)	16.0 (11.2)	14.7 (9.4)	10.8 (10.8)
Total FLA, Cooling	w/o Auxiliary Fan	35.1	14.1	28.3	15.3	15.3	11.8
	w/Auxiliary Fan	40.8	16.6	33.3	17.5	17.5	13.8
10 kW Heat	MCA w/o Aux Fan	48.6	21.9	41.4	22.1	22.1	17.9
	MOP w/o Aux Fan	60.0	25.0	45.0	25.0	25.0	20.0
	MCA w/Aux Fan	54.3	21.9	46.4	24.3	24.3	19.9
	MOP w/Aux Fan	60.0	25.0	50.0	25.0	25.0	20.0
15 kW Heat	MCA w/o Aux Fan	—	29.2	55.2	34.4	3	23.7
	MOP w/o Aux Fan	—	30.0	60.0	35.0	35.0	25.0
	MCA w/Aux Fan	—	29.2	60.2	36.4	36.4	25.7
	MOP w/Aux Fan	—	30.0	70.0	40.0	40.0	30.0
20 kW Heat	MCA w/o Aux Fan	—	38.9	74.6	39.6	39.6	31.5
	MOP w/o Aux Fan	—	40.0	80.0	40.0	40.0	35.0
	MCA w/Aux Fan	—	38.9	79.6	41.8	41.8	33.5
	MOP w/Aux Fan	—	40.0	90.0	50.0	50.0	40.0
Operating Range		216V–253V	432V–506V	216V–253V	373V–456V	342V–418V	517V–600V

MODEL 648		230/240V	460/480V	230/240V	415V	380V	575V
Electric Power		1Φ-60Hz	3Φ-60Hz	3Φ-60Hz	3Φ-50Hz	3Φ-50Hz	3Φ-60Hz
Evaporator Fan Motor FLA		5.7	2.5	5	2.2	2.2	2.0
Condenser Motor FLA		11.0	3.1	6.1	2.8	2.8	2.5
Compressor Motor RLA		8.3	5.1	6.1	5.1	5.1	3.3
Heat 20kW, Amps (Actual kW)		53.3 (20.1)	26.0 (21.6)	53.3 (20.6)	31.2 (22.4)	29.3 (18.8)	21.7 (21.6)
Heat 15kW, Amps (Actual kW)		37.8 (13.8)	18.5 (15.4)	37.3 (13.8)	22.5 (14.9)	24.9 (15.6)	15.5 (15.4)
Heat 10kW, Amps (Actual kW)		26.0 (10.3)	13.0 (10.8)	26.0 (10.3)	16.0 (11.2)	14.7 (9.4)	10.8 (10.8)
Total FLA, Cooling	w/o Auxiliary Fan	34.8	17.3	19.5	16.7	16.7	12.6
	w/Auxiliary Fan	40.5	19.8	24.5	18.9	18.9	14.6
10 kW Heat	MCA w/o Aux Fan	36.9	21.2	41.4	22.1	22.1	17.9
	MOP w/o Aux Fan	50.0	25.0	45.0	25.0	25.0	20.0
	MCA w/Aux Fan	42.6	23.7	46.4	24.3	24.3	19.9
	MOP w/Aux Fan	60.0	25.0	50.0	25.0	25.0	20.0
15 kW Heat	MCA w/o Aux Fan	—	29.2	55.2	34.4	3	23.7
	MOP w/o Aux Fan	—	30.0	60.0	35.0	35.0	25.0
	MCA w/Aux Fan	—	29.2	60.2	36.4	36.4	25.7
	MOP w/Aux Fan	—	30.0	70.0	40.0	40.0	30.0
20 kW Heat	MCA w/o Aux Fan	—	38.9	74.6	39.6	39.6	31.5
	MOP w/o Aux Fan	—	40.0	80.0	40.0	40.0	35.0
	MCA w/Aux Fan	—	38.9	79.6	41.8	41.8	33.5
	MOP w/Aux Fan	—	40.0	90.0	50.0	50.0	40.0
Operating Range		216V–253V	432V–506V	216V–253V	373V–456V	342V–418V	517V–600V

MODEL 660		230/240V	460/480V	230/240V	415V	380V	575V
Electric Power		1Φ-60Hz	3Φ-60Hz	3Φ-60Hz	3Φ-50Hz	3Φ-50Hz	3Φ-60Hz
Evaporator Fan Motor FLA		5.7	2.5	5.0	2.2	2.2	2.0
Condenser Motor FLA		11.0	3.1	6.2	2.8	2.8	2.5
Compressor Motor RLA		15.4	6.0	11.5	5.1	5.1	4.3
Heat 20kW, Amps (Actual kW)		53.3 (20.1)	26.0 (21.6)	53.3 (20.6)	31.2 (22.4)	29.3 (18.8)	21.7 (21.6)
Heat 15kW, Amps (Actual kW)		37.8 (13.8)	18.5 (15.4)	37.3 (13.8)	22.5 (14.9)	24.9 (15.6)	15.5 (15.4)
Heat 10kW, Amps (Actual kW)		26.0 (10.3)	13.0 (10.8)	26.0 (10.3)	16.0 (11.2)	14.7 (9.4)	10.8 (10.8)
Total FLA, Cooling	w/o Auxiliary Fan	47.5	19.1	35.7	16.7	16.7	14.6
	w/Auxiliary Fan	53.2	21.6	40.7	18.9	18.9	16.6
10 kW Heat	MCA w/o Aux Fan	52.9	21.2	41.4	22.1	22.1	17.9
	MOP w/o Aux Fan	70.0	25.0	50.0	25.0	25.0	20.0
	MCA w/Aux Fan	58.6	23.7	46.4	24.3	24.3	19.9
	MOP w/Aux Fan	80.0	25.0	50.0	25.0	25.0	25.0
15 kW Heat	MCA w/o Aux Fan	—	28.2	55.2	34.4	34.4	23.7
	MOP w/o Aux Fan	—	30.0	60.0	35.0	35.0	25.0
	MCA w/Aux Fan	—	30.7	60.2	36.6	36.6	25.7
	MOP w/Aux Fan	—	35.0	70.0	40.0	40.0	30.0
20 kW Heat	MCA w/o Aux Fan	—	37.5	74.6	39.6	39.6	31.5
	MOP w/o Aux Fan	—	40.0	80.0	40.0	40.0	35.0
	MCA w/Aux Fan	—	40.0	79.6	41.8	41.8	33.5
	MOP w/Aux Fan	—	50.0	80.0	50.0	50.0	35.0
Operating Range		216V–253V	432V–506V	216V–253V	373V–456V	342V–418V	517V–600V