PATTON PAK INVERTER

SCMREF THAI

- Factory Applied Condenser Fin & Tube "Blue Coil Coat" Corrosion Protection
- High Efficiency BLDC Scroll Compressor
- Slim profile, Suitable for Limited Space
- Web monitoring readiness
- Easy Access to Service
- Low Noise
- User Friendly Digital Controller with LED Display

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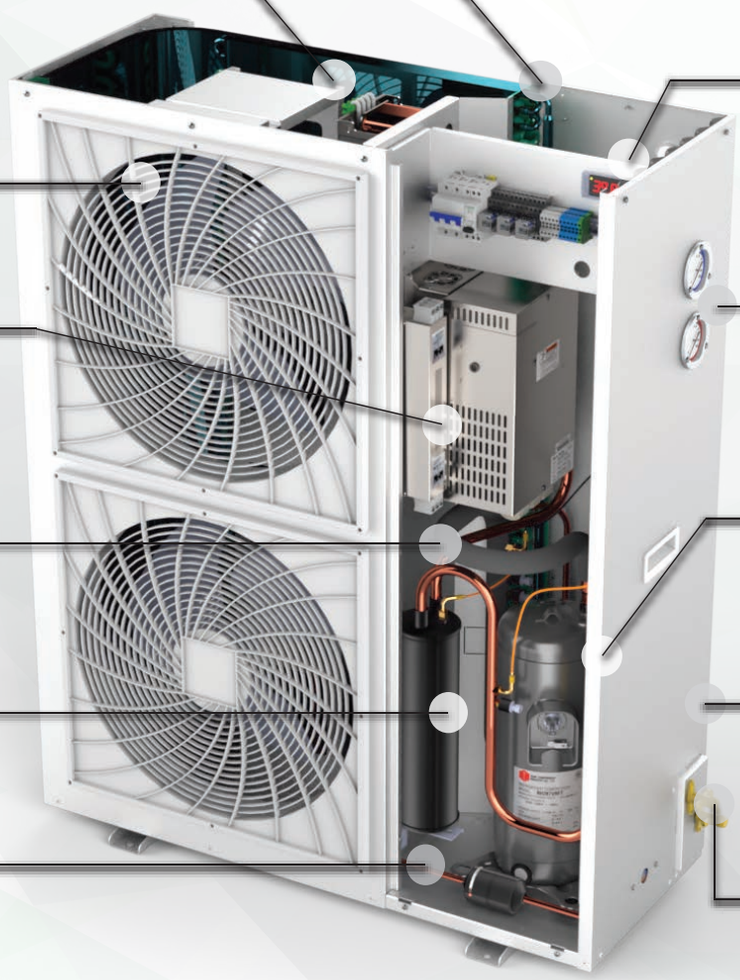
- Full Coil Coating Condenser Fin & Condenser Tube
- Fan Speed Control *
- EMI Filter * Corresponding to EMC Requirement
- Sound Insulation Casing
- Additional Oil Pre-charged
- Easy Access Front Door Design



- Phase Protection
- Discharge gas overheat Protection
- Hi/Low Pressure Protection
- Compressor minimum off time control
- Web monitoring readiness **
- Suction/Discharge Pressure Gauge *
- BLDC Scroll Compressor 20-100 RPS
- Galvanized Steel Casing with Powder Coating
- Easy Access Liquid Sight Glass with Moisture Indicator

*Optional

**Web monitorring readiness

- Remote parameter setting
- Real-time suction pressure, discharge temperature, operating duty, running status, alarm status

Inverter Benefits

- **Precision Temperature Control**
  Unnoticeable swing in temperature because of its adaptation of capacity to match with any variable conditions automatically
- **High Efficiency**
  Deliver only the energy needed to satisfy the cooling condition, thereby saving both energy and cash
- **Humidity Control**
  Enjoy greater comfortable climate with desired level of humidity at a glance

PATTON PAK INVERTER

SCMREF THAI

R404A Med Temp

Capacity (Watts) @20Hz								Power Input (Watts) @20Hz					
Model	Ambient	Evaporating Temp (°C)						Evaporating Temp (°C)					
	(°C)	-20	-15	-10	-5	0	5	-20	-15	-10	-5	0	5
CIV400	32	1.09	1.32	1.60	1.92	2.29	2.71	0.64	0.65	0.65	0.66	0.66	0.67
	38	0.95	1.17	1.44	1.75	2.11	2.52	0.72	0.73	0.73	0.73	0.73	0.73
	43	0.86	1.07	1.32	1.62	1.96	2.35	0.80	0.80	0.80	0.80	0.80	0.80
CIV500	32	1.24	1.58	1.94	2.34	2.80	3.32	0.76	0.78	0.79	0.80	0.81	0.81
	38	1.11	1.43	1.77	2.16	2.59	3.08	0.84	0.86	0.87	0.89	0.90	0.91
	43	1.01	1.31	1.63	1.99	2.40	2.87	0.92	0.94	0.95	0.97	0.99	1.00
CIV800	32	2.09	2.64	3.29	4.05	4.91	5.87	1.63	1.62	1.60	1.59	1.59	1.58
	38	1.92	2.42	3.03	3.73	4.54	5.45	1.77	1.75	1.74	1.73	1.72	1.71
	43	1.75	2.22	2.78	3.45	4.21	5.08	1.90	1.88	1.87	1.86	1.85	1.85
CIV1000	32	2.56	3.23	4.03	4.95	5.99	7.13	1.73	1.71	1.71	1.71	1.71	1.71
	38	2.33	2.96	3.70	4.56	5.52	6.60	1.93	1.92	1.92	1.93	1.94	1.95
	43	2.13	2.71	3.41	4.21	5.12	6.12	2.15	2.15	2.15	2.16	2.17	2.19

Capacity (Watts) @60Hz								Power Input (Watts) @60Hz					
Model	Ambient	Evaporating Temp (°C)						Evaporating Temp (°C)					
	(°C)	-20	-15	-10	-5	0	5	-20	-15	-10	-5	0	5
CIV400	32	3.15	3.80	4.60	5.56	6.67	7.91	1.76	1.81	1.87	1.91	1.94	1.96
	38	3.08	3.68	4.43	5.33	6.36	7.52	2.05	2.09	2.12	2.15	2.18	2.20
	43	2.95	3.50	4.20	5.03	6.00	7.09	2.31	2.33	2.35	2.38	2.40	2.42
CIV500	32	3.86	4.89	6.00	7.22	8.56	10.07	2.21	2.30	2.37	2.45	2.53	2.60
	38	3.48	4.45	5.48	6.60	7.86	9.26	2.48	2.56	2.66	2.75	2.84	2.93
	43	3.14	4.05	5.01	6.06	7.23	8.55	2.75	2.83	2.93	3.02	3.12	3.22
CIV800	32	6.62	8.07	9.79	11.77	13.95	16.38	4.22	4.23	4.27	4.32	4.40	4.49
	38	6.05	7.38	8.96	10.79	12.85	15.12	4.68	4.70	4.74	4.81	4.90	5.02
	43	5.54	6.75	8.22	9.94	11.87	14.01	5.10	5.14	5.19	5.27	5.38	5.51
CIV1000	32	7.64	9.29	11.27	13.56	16.11	18.91	4.68	4.72	4.79	4.88	5.00	5.15
	38	6.92	8.46	10.29	12.42	14.82	17.45	5.27	5.31	5.39	5.50	5.63	5.80
	43	6.27	7.71	9.45	11.46	13.75	16.25	5.81	5.86	5.95	6.07	6.21	6.38

Capacity (Watts) @100Hz								Power Input (Watts) @100Hz					
Model	Ambient	Evaporating Temp (°C)						Evaporating Temp (°C)					
	(°C)	-20	-15	-10	-5	0	5	-20	-15	-10	-5	0	5
CIV400	32	5.08	6.14	7.43	8.91	10.59	12.43	3.53	3.68	3.81	3.92	4.02	4.11
	38	4.61	5.58	6.77	8.15	9.69	11.40	4.11	4.23	4.33	4.43	4.53	4.61
	43	4.18	5.08	6.17	7.46	8.88	10.46	4.65	4.74	4.82	4.90	4.99	5.07
CIV500	32	5.99	7.56	9.21	10.96	12.90	15.01	4.32	4.53	4.75	4.99	5.23	5.48
	38	5.34	6.79	8.30	9.91	11.68	13.63	4.88	5.10	5.33	5.58	5.84	6.12
	43	4.77	6.12	7.52	9.01	10.63	12.44	5.42	5.63	5.87	6.13	6.42	6.72
CIV800	32	10.15	12.14	14.52	17.20	20.20	23.41	7.81	8.01	8.25	8.57	8.93	9.37
	38	9.09	10.89	13.05	15.55	18.33	21.35	8.64	8.87	9.16	9.50	9.90	10.37
	43	8.13	9.79	11.79	14.12	16.70	19.54	9.46	9.71	10.02	10.40	10.86	11.37
CIV1000	32	11.86	14.12	16.86	19.97	23.43	27.18	8.95	9.22	9.54	9.93	10.38	10.91
	38	10.63	12.71	15.21	18.08	21.28	24.76	9.97	10.24	10.57	11.00	11.49	12.08
	43	9.53	11.45	13.78	16.45	19.45	22.71	10.87	11.15	11.50	11.96	12.49	13.13

Note : The rating condition is based on a suction superheat of 10 K. , Subcooling with the limits of the condensing unit

PATTON PAK INVERTER

SCMREF THAI

R448A / R449A Med Temp

Model	Ambient (°C)	Capacity (Watts) @20Hz — Evaporating Temp (°C)						Power Input (Watts) @20Hz — Evaporating Temp (°C)					
		-20	-15	-10	-5	0	5	-20	-15	-10	-5	0	5
CIV400	32	0.89	1.10	1.35	1.64	1.99	2.38	0.56	0.58	0.59	0.60	0.61	0.62
	38	0.83	1.02	1.26	1.54	1.86	2.23	0.63	0.64	0.66	0.67	0.68	0.69
	43	0.77	0.95	1.18	1.45	1.76	2.11	0.69	0.71	0.72	0.73	0.75	0.76
CIV500	32	1.05	1.35	1.69	2.07	2.51	3.03	0.71	0.73	0.75	0.76	0.78	0.79
	38	0.96	1.25	1.56	1.91	2.33	2.81	0.78	0.81	0.83	0.85	0.87	0.88
	43	0.88	1.15	1.44	1.78	2.16	2.62	0.85	0.88	0.91	0.93	0.95	0.97
CIV800	32	1.71	2.14	2.69	3.33	4.08	4.90	1.38	1.41	1.44	1.46	1.46	1.46
	38	1.58	1.99	2.50	3.12	3.82	4.61	1.51	1.54	1.57	1.59	1.60	1.60
	43	1.47	1.85	2.34	2.92	3.60	4.35	1.63	1.67	1.70	1.73	1.74	1.74
CIV1000	32	2.17	2.77	3.49	4.33	5.27	6.31	1.46	1.51	1.54	1.57	1.60	1.61
	38	2.01	2.57	3.26	4.05	4.94	5.92	1.67	1.72	1.76	1.79	1.82	1.83
	43	1.86	2.39	3.04	3.79	4.64	5.58	1.87	1.92	1.96	2.00	2.03	2.04

Model	Ambient (°C)	Capacity (Watts) @60Hz — Evaporating Temp (°C)						Power Input (Watts) @60Hz — Evaporating Temp (°C)					
		-20	-15	-10	-5	0	5	-20	-15	-10	-5	0	5
CIV400	32	2.84	3.41	4.13	4.99	5.99	7.11	1.56	1.61	1.66	1.70	1.74	1.77
	38	2.70	3.23	3.91	4.73	5.67	6.74	1.79	1.84	1.89	1.93	1.97	2.01
	43	2.57	3.07	3.71	4.49	5.40	6.41	2.01	2.05	2.10	2.15	2.19	2.23
CIV500	32	3.34	4.30	5.31	6.43	7.71	9.20	1.84	1.93	2.02	2.10	2.19	2.28
	38	3.03	3.92	4.86	5.89	7.09	8.46	2.06	2.16	2.26	2.36	2.45	2.57
	43	2.74	3.58	4.46	5.43	6.55	7.85	2.26	2.38	2.48	2.59	2.70	2.82
CIV800	32	5.40	6.68	8.19	9.92	11.86	14.03	3.49	3.64	3.77	3.90	4.02	4.13
	38	5.04	6.23	7.64	9.27	11.11	13.17	3.90	4.06	4.22	4.37	4.51	4.63
	43	4.71	5.83	7.16	8.71	10.47	12.43	4.30	4.47	4.65	4.81	4.96	5.11
CIV1000	32	6.58	8.08	9.95	12.11	14.55	17.19	3.90	4.09	4.28	4.46	4.64	4.83
	38	6.08	7.51	9.28	11.31	13.62	16.11	4.39	4.61	4.82	5.04	5.25	5.47
	43	5.65	7.02	8.70	10.64	12.82	15.20	4.85	5.09	5.34	5.58	5.82	6.06

Model	Ambient (°C)	Capacity (Watts) @100Hz — Evaporating Temp (°C)						Power Input (Watts) @100Hz — Evaporating Temp (°C)					
		-20	-15	-10	-5	0	5	-20	-15	-10	-5	0	5
CIV400	32	4.41	5.35	6.54	7.92	9.49	11.19	3.10	3.23	3.37	3.51	3.63	3.76
	38	4.06	4.94	6.04	7.35	8.83	10.43	3.58	3.72	3.85	3.99	4.12	4.25
	43	3.76	4.58	5.62	6.86	8.25	9.78	4.04	4.17	4.30	4.43	4.58	4.72
CIV500	32	5.13	6.55	8.03	9.64	11.44	13.50	3.34	3.55	3.76	3.98	4.21	4.48
	38	4.58	5.91	7.28	8.76	10.43	12.36	3.75	3.98	4.21	4.46	4.72	5.01
	43	4.12	5.38	6.66	8.05	9.62	11.42	4.13	4.38	4.64	4.90	5.19	5.51
CIV800	32	8.43	10.26	12.40	14.86	17.59	20.58	6.49	6.89	7.31	7.73	8.17	8.63
	38	7.75	9.47	11.49	13.76	16.30	19.08	7.29	7.74	8.18	8.65	9.13	9.62
	43	7.17	8.80	10.69	12.83	15.22	17.85	8.07	8.55	9.03	9.52	10.03	10.53
CIV1000	32	10.46	12.57	15.17	18.15	21.45	25.03	7.48	7.97	8.48	9.05	9.68	10.35
	38	9.56	11.56	13.99	16.79	19.87	23.20	8.34	8.88	9.47	10.11	10.83	11.59
	43	8.82	10.71	13.00	15.64	18.55	21.66	9.14	9.75	10.41	11.12	11.91	12.78

Note : 1. The rating condition is based on a suction superheat of 10 K, Subcooling with the limits of the condensing unit
2. R448A & R449A are considered at dew point

PATTON PAK INVERTER

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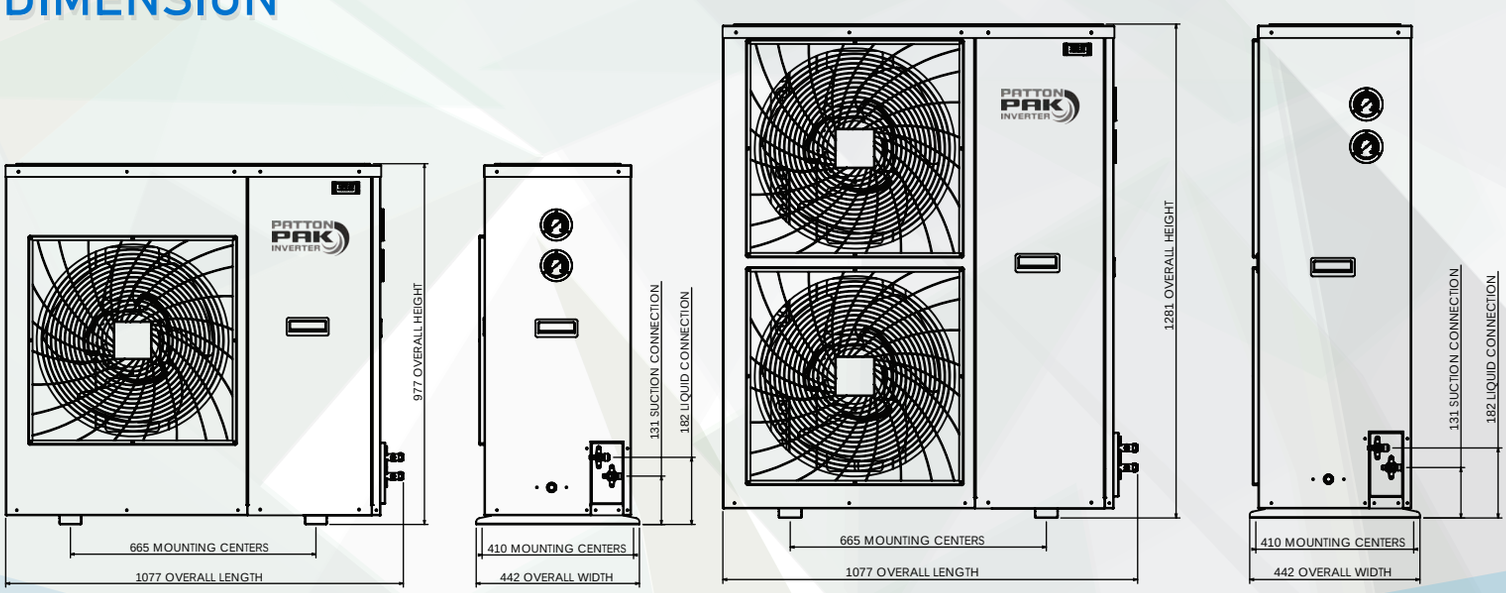
TECHNICAL DATA

Model Name	CIV400	CIV500	CIV800	CIV1000
COMPRESSOR				
Model	ADB33FCAMTS	ADB42FCAMTS	ADB66FDAMTS	ADB78FDAMTS
Voltage	3PH AC 380-460V 50/60 Hz			
RLA Amps	7.5	9.1	13.3	15.2
MCC Amps	13.1	13.1	21.5	23.8
Oil Type	PVE 68			
Oil Pre-charge	1.9 L			
CONDENSER				
Airflow (m3/hr)	4,880	4,880	8,600	9,690
No. Fan Motor (1)	1 x 20"	1 x 20"	2 x 20"	2 x 20"
Total Watts	118	118	236	236
Receiver (litre)	7.9	7.9	7.9	7.9
Suction size	7/8"	7/8"	1-1/8"	1-1/8"
Liquid size	1/2"	1/2"	1/2"	5/8"
Weight (kg)	105	108	130	140
Noise level (dBA) (2)	63	63	64	64

Note : (1) All fans 220-240V / 1PH / 50Hz
(2) All noise level rating are “Free Field” based at a distance of 2.0 meters and 100 RPS

DIMENSION



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"Quality we care, United we are"