PATLON
AIRCRAFT & INDUSTRIES LTD

ECO GATE ENABLED

EXCLUSIVE DISTRIBUTOR ITW GSE

3500 PCA

480V / 600V

Next generation PCA and a milestone in advancing gate economics

The ITW GSE 3500 provides a pleasant and welcoming atmosphere for crew and passengers as soon as they step into the aircraft. Automated Aircraft Type Detection allows the 3500 PCA to automatically adapt its airflow to the specific aircraft type – and not just an aircraft category. This not only helps to avoid operator errors – it also increases the PCA cooling performance by more than 50% and improves the passenger comfort.

DESIGNED FOR ALL KINDS OF AIRCRAFT

The truly modular ITW GSE 3500 PCA is an innovative, reliable and environmentally friendly point-of-use pre-conditioned air unit. It comes in two different configurations, e.g. for mounting on the passenger bridge or for apron mounting designed to cool all types of aircraft from regional jets to jumbos.

IMPROVE YOUR ENVIRONMENT AND CUT COST

The increasing focus on environmental issues is a great incentive to switch to external PCA and 400 Hz solid-state units while the aircraft is parked at the gate, instead of running the aircraft APU. This approach reduces carbon emissions by approx. 80-85%. Furthermore, it leads to savings on the costly maintenance of the on-board APU. For the airports, this also means a reduction of the noise level to the benefit of the airport personnel, passengers and to surroundings in general.

UNPARALLELLED EFFICIENCY

The 3500 is much more than just a PCA. By containing key EcoGate technologies, the 3500 can share exess power with other EcoGate enabled equipment. By linking your ITW GSE equipment together in an integrated system, EcoGate unlocks new efficiencies and removes power-related barriers to progress at the gate. The 3500 hosts communication and power distribution like no other, and is the ultimate in passenger and crew comfort.

SPECIFICATIONS

ITW GSE 3500 PCA 150 & 210

EXCLUSIVE DISTRIBUTOR

Input
- Rectification: 12 pulse
- Line current distortion: < 10%
- Inrush current: None, softstart
- Power factor: >0.97 at 100% load

Output
- Discharge air temperature: Down to 0°C / 32°F, depending on ambient temperature, relative humidity, and air flow. For specified cooling calculations, please contact Patlon.

Conformity by complying with
- UL 60335-2-40 — 480 V version, only
- CSA SPE-1000 — Field Evaluation of Electrical Equipment
- EN61000-6-2 — EMC - immunity standard
- EN61000-6-4 — EMC - emission standard
- EN62040-1-1 — LVD safety standard
- EN61558-2-6 — General & safety requirement
- 1915-1&2 — Machinery - general safety requirement
- 12312-17 — Aircraft ground support equipment, specific requirements

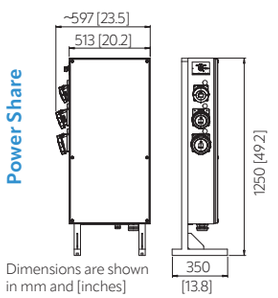
Directive conformity
- ETL listing — 60 Hz version, only
- 2004/108/EC — EMC Directive
- 2006/95/EC — LVD Directive
- 2006/42/EC — Machinery Directive

Miscellaneous
- MTTR: Typically 20 minutes
- Refrigerant: R454B
- Construction: Welded and bolted, anti-corrosive coated steel frame

Environmental data
- Operating temperature: -30°C to +50°C (-22°F to +122°F)
- Relative humidity: 10-100%, non condensing
- Noise level: < 85 dB(A) at 4.6 m
- IP class: IP54 (Electronic part)

STANDARD Features
- Stepless regulation via VFD on main blower, compressors and heater
- Quick swap of cooling modules
- Internal ducts made of stainless steel
- Smoke detector
- Measure of outlet pressure and air flow
- Air temperature sensors (discharge and inlet)
- 2 pressure and 3 temperature sensors as well as 1 sight glass on each refrigerant circuit
- Micro channel condensers (sea water resistant aluminium)
- ePM10 70% medium filtration including clogging alarm (EN779: M6 / ASHRAE 52.2: MERV 11 eq.)
- Internal 14" damper on the second outlet
- Special condenser coating
- TCP/IP interface via RJ45 port
- Fast evaporator de-icing
- Automated Aircraft Type Detection
- Color: RAL 7035 (standard) or any other RAL colour on request

Available options
- Cabin sensor
- Feet for ground mounted units
- RS485 port with Modbus/Jbus protocol
- 400 Hz output (AEF-150 only)
- Intelligent Power Management CE: all PCA models. UL: 60/90/120 T.
- ePM1 70% fine filtration (EN779: F8 / ASHRAE 52.2: MERV 14 eq.)
- Removable heater module with overtemperature protection
- Condensate separator for hot and humid climates
- Cover for modules (RAL 7035)
- 14" or 18" single outlet (for PCA 210 only)
- Remote control box with display and single communication cable
- Power Share: 50/60 Hz receptacle for charging eGPUs or other AC units



Model	Marking	Input voltage	Frequency	Current (Line)	Nominal compressor rating	Airflow		Pressure		Weight		Heater (Optional)	Condensate Pumps	Outlets
		[V]	[Hz]	[A]	[Tons]	[kg/min]	[lb/min]	[kPa]	[inH_2O]	[kg]	[lbs]	[kW]	[Qty]	[Qty]
AEF-150/2 (H)	UL	3 x 480	60	145	45	150	330	10	40	3,200	7,000	72	2	1 x 14"
PAPCA150-45T	CSA	3 x 600	60	116	45	150	330	10	40	3,200	7,000	72	2	1 x 14"
AEF-150/2X (H)	UL	3 x 480	60	145	60	150	330	10	40	3,200	7,000	72	2	1 x 14"
PAPCA150-60T	CSA	3 x 600	60	116	60	150	330	10	40	3,200	7,000	72	2	1 x 14"
AEF-210/3 (H)	UL	3 x 480	60	236	90	210	460	10	40	4,000	8,800	120	4	2 x 14"
PAPCA210-90T	CSA	3 x 600	60	188	90	210	460	10	40	4,000	8,800	120	4	2 x 14"
AEF-210/4 (H)	UL	3 x 480	60	289	120	210	460	10	40	4,500	9,900	120	4	2 x 14"
PAPCA210-120T	CSA	3 x 600	60	231	120	210	460	10	40	4,500	9,900	120	4	2 x 14"

Specifications are subject to change without prior notice. Exclusive Proprietary of ITW GSE. For hot regions, a sub-freeze PCA is available. Contact us to hear more.