

MAK PCA 20HP

Efficient Ground Cooling for Aircraft



The MAK High pressure preconditioned air unit is designed for cater continuous cooling during ground power-on and maintenance of fighter jet aircraft. It is used to control the heat generation of onboard electronics.

SALIENT FEATURES

- ▶ Diesel engines from Deutz/Cummins equivalent conforming to latest EPA/Euro emission norms
- ▶ PLC based control system with user HMI
- ▶ Electric driven models
- ▶ Interactive GUI visible under all weather conditions
- ▶ Automatic temperature control
- ▶ Graphical representation of operational data
- ▶ Cabin heater (Optional)
- ▶ Fault log chart & troubleshooting guide
- ▶ Meets MIL, AHM & ARP standards
- ▶ MAK RDMS – Remote Diagnostic and Monitoring System (Optional)

PCA MODEL	PCA20-HP
Fighter Jet - F35 and F16	X
SUPPLY AIR	
Air Flow kg/s (lbs/min)	0.45 (60)
Outlet Pressure Max. PSI (kPa)	up to 5.8 (40)
Cooling Mode - Unit Outlet Air Temperature °C (°F)	Up to -4 (24.8)
Heating Mode - Unit Outlet Air Temperature °C (°F)	Up to 50(122)
Air Temperature at Aircraft Inlet °C (°F)	2-10(36-50)
Aircraft Outlet Hose(s)	8" Dia 40' Main hose with end connection of 4" Dia 10' and suitable aircraft connector P/N. F20736-2
Actual Cooling Capacity in Tons	20
AMBIENT TEMPERATURE	
Summer	35°C DB/25°C WB (95°F DB/77°F WB)
Winter	-20°C DB (-4°F WB)
BLOWER	
Type of Blower Fan (incl. material of construction)	Variable speed high performance and high speed blower with latest technology
Blower Motor Rating kW (Hp)	30(40)
Blower Quantity	1
ELECTRICAL/PHYSICAL	
Nominal Voltage	415V, 3Ø, 50Hz/460V, 3Ø, 60Hz
Power at operating point, kWh	53
Full Load Amps (FLA)	80
MCA (Minimum Circuit Ampacity)	100
CONTROL SYSTEM	
Controller	PLC based Intelligent Controller
Expansion and Hot Gas Valves	Highly precise, accurate and reliable Electronic Valves
Speed Control for Compressors, Condenser / Blower fans	VFD Controlled
COMPRESSORS/CONDENSERS/EVAPORATORS	
Type of Compressor	Hermetic Scroll, R410A
Quantity	1
Stages	1
Rating	20 Tons x 1 no
Coils	Copper Tube, Aluminium Fins
ADDITIONAL INFORMATION	
Type of filter / filtration level	MERV8 / 3-10 micron
PHYSICAL CHARACTERISTICS	
Dimensions excluding mounting frame in mm. Note: Length does not include outlet pipe	L4501 x W2200 x H2511 (L177 x W87 x H99)
Maximum Operating Weight Kg's (Lbs)	3200 (7056)

OPTIONAL FEATURES

Remote Diagnostic and Monitoring System (RDMS) | Heating Mode Operation | Remote Operating Panel

Note: Built-In Diesel generator model is available based on the request.

For Detailed technical specifications or any other queries please contact us

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