

Air Burners PGFireBox 100 kW_e Specifications

Power Module

1	POWER REQUIREMENTS	460 VAC/60 Hz/3 ϕ or 400 VAC/50 Hz/3 ϕ , 225 A Service
2	POWER FACTOR	Load- and site-dependent (0.9 - 1.0)
3	POWER GENERATION MODULE	Fully-Integrated Organic Rankine Cycle (ORC) Power Module with 100 kW Gross Asynchronous Generator
4	POWER GENERATION	Gross Electric: 100kW, Thermal: 1MW
5	ORC WORKING FLUID	Honeywell Genetron 245fa (Non-ozone-depleting)
6	SAFETY SYSTEMS	Electrical Grid Protection, Over-Temperature, Over-Pressure
7	CONTROL SYSTEM	PLC-Based with Touch-Screen
8	REMOTE MONITORING	Internet-based monitoring and Operations
9	TRANSPORTATION AND SETUP	Ships in containers; Ready for immediate use after simple hood installation; Padeyes provided for crane lifting. Full skid base facilitates final positioning
10	COOLING WATER (CW) REQUIREMENTS	325 gpm [20.5 l/s], 70° F [20° C] See option below
11	CW INTERFACE	4" Nominal, 150 lb-Class ANSI Flanges
12	INDUCTION FAN	PLC-Controlled; Variable Speed
13	HOT WATER (HW) PUMP	PLC-Controlled; Variable Speed
14	HW SYSTEM WORKING FLUID	Ethylene-Glycol/Water Mix
15	CONSTRUCTION	Steel WF beam and square tubing construction with full-length skid plate; Epoxy-paint
16	APPROX. WEIGHT	35,500 lbs [16,100kg]
17	DIMENSIONS (W/ HOOD INSTALLED)	L x W x H
		34' x 7'5" x 8'5"
		[10.4 m x 2.1 m x 2.6 m]

FireBox Module

1	AIR CURTAIN FAN POWER	30 hp [22 kW] Electric Motor VFD-Controlled
2	BURN CONTAINER (FIREBOX)	4" [102 mm] thick refractory panels filled with proprietary thermal ceramic material. Two full-height rear doors, two ignition holes
3	SAFETY SYSTEMS	Fully integrated with PGF controller
4	INSTRUMENT PANEL	Touch-screen control from PGF Control Room
5	AIR CURTAIN FAN MOTOR CONTROL SYSTEM	PLC-Based; Speed selection fully integrated with system controller
6	AIR SUPPLY	Custom Heavy Duty Fan
7	TRANSPORTATION AND SETUP	Shipped fully assembled and tested, requires only connection of the three-phase motor power to the PG Module power distribution panel
8	WASTE MATERIAL ELIMINATION RATE	Up to 8 tons per hour
9	FIREBOX MODULE WEIGHT	36,000 lbs [16,300 kg]
10	OVERALL DIMENSIONS	L x W x H
		30' x 7' 5" x 8' 5"
		[9.1 m x 2.1 m x 2.6 m]

Cooling Module (Optional)

1	APPROX. WEIGHT (DRY)	17,500 lbs [7900 kg]
2	DIMENSIONS (INCLUDING SKID BASE)	L x W x H
		32' x 7' x 13'
		[9.7 m x 2.1 m x 4 m]