

SDRA

Portable High Temperature Blower Heater

- 30, 48 and 60kW
- 102,360 to 240,720 BTUH
- 480 or 600 Volts Three Phase
- Built-in Controls
- Air Temperature to 180°F
- Use with Flexible Duct

Applications

- Aircraft Cabin Heating
- Plant Maintenance
- Building Construction Sites
- Curing Plaster and Concrete
- Warming Workers
- Drying After Flood Damage
- Insect Control in Grain Mills
- Thawing Frozen Pipes
- Re-circulating Fresh Air
- Circulating Fresh Air
- Exhausting Contaminated Air

Description

The Chromalox SDRA SuperDragon is a rugged, self contained, mobile electric blower heater that can be used with or without optional inlet or outlet 20" diameter flexible duct. The SDRA units can be used for comfort heating or process heating temperatures to 180°F, and can be located in an ambient of up to 130°F. The SDRA includes a fan only switch, that allows the unit to be used to recirculate room air, supply fresh air source, or capture fume exhaust. The SDRA heaters provide for easily adjustable airflow for a wide variety of applications including flexible ducting up to 165 feet in length. Each unit includes two thermostats to enable the operator to set the maximum inlet and outlet temperatures, magnetic contactor(s), a 120 volt control transformer, power on pilot lights and a high limit cutout to protect the heater against unintended low air flow conditions. The SDRA can be left unattended without the threat of fire or by-product of combustion from fuel fired heaters. The bright red polyester powder coated heater can be easily moved because of two 10" diameter pneumatic wheels on the outlet and a 4" lockable swivel castor on the inlet.

Construction

Heating Section

A structural frame consisting of 2 spun steel rings and formed steel channels support a 20 gauge steel cylinder phosphate coated for corrosion resistance and finished in red polyester powder coat paint. The cylinder contains patented metal sheath Fintube® heating elements that include industrial grade .475" diameter steel sheath tubular heaters with furnace brazed steel fins for maximum



heat transfer. The elements are firmly attached to a robust steel assembly with steel bulkhead threaded fittings.

Fan Section

The fan assembly includes a 16" tubeaxial fan designed for industrial use and includes a streamlined belt tunnel that isolates the motor, drives and bearings from the air stream. The fan blades are precision balanced made with spark resistant aluminum and includes permanently lubricated ball bearings. Safety belt guards are supplied to protect operating personnel from harm. The drip proof motor is rated 1hp, 3 phase 1,725 rpm and operates on line voltage. Fan speed can be varied from 1,500 to 2,300 RPM for various air flows by use of adjustable pulleys.

Controls

Two adjustable thermostats (60 to 180°F) are located on the heater cylinder to allow the inlet and outlet temperatures to be adjustable for single pass heating or recirculated air temperature control. The power is switched by magnetic contactor(s) which are located in a gasketed NEMA 4 enclosure along with the motor starter, control voltage transformer and heater power fusing. A fan only toggle switch and pilot lights for power and heater are also located in the enclosure.

Safety Guards

Front and rear grills are 10 gauge, finished in black polyester powder coat paint and are designed to meet OSHA requirements.

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Portable High Temperature Blower Heater (*cont'd.*)

Specifications and Ordering Information

kW	Volts 3 Ph	Amps	BTUH	HP	CFM	Temp. Rise of F	Model	Stock	PCN	Dimensions (In.)			Wt. (Lbs)
										W	L	H	
30	480	37.2	102,360	1	1100-2700	35-88	SDRA-30-43	S	295689	26	44	38.5	150
30	600	30.0	102,360	1	1100-2700	35-88	SDRA-30-93	NS	295697	26	44	38.5	150
48	480	58.9	163,776	1	1100-2700	59-141	SDRA-48-43	NS	295700	30.25	44	38.5	160
48	600	47.3	163,776	1	1100-2700	59-141	SDRA-48-93	NS	295718	30.25	44	38.5	160
60	480	73.3	204,720	1	1100-2700	70-172	SDRA-60-43	S	295726	30.25	44	38.5	170
60	600	58.9	204,720	1	1100-2700	70-172	SDRA-60-93	NS	295734	30.25	44	38.5	170

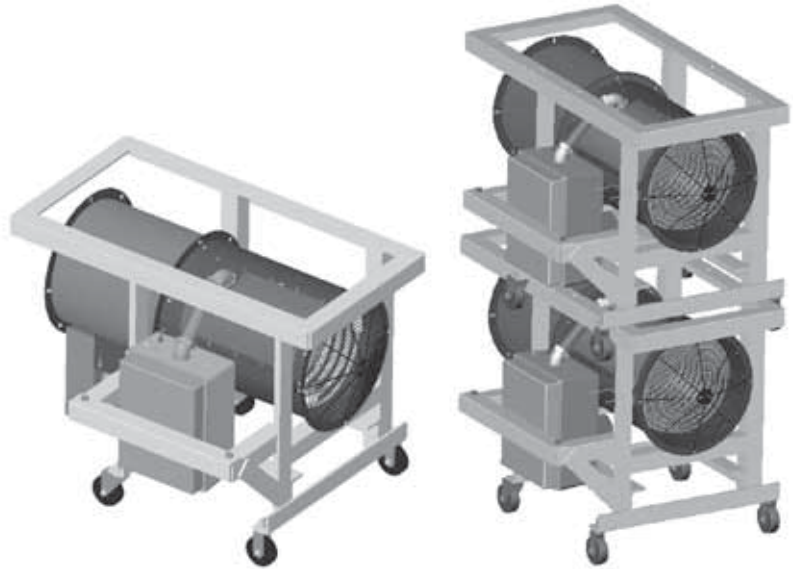
Stock Status: S = stock AS = assembly stock NS = non-stock
To Order—Specify model, PCN, kW, volts, phase and quantity.

SDRA-RG Series

Rental Grade Portable Blower Heater

Description

The SDRA-RG series of SuperDragons have the same features as the standard industrial grade units except that they feature a welded steel frame and can be stacked two high to reduce floor space during storage or transportation to various venues. The rental grade units feature 4" diameter casters, two of which lock.



Two SDRA-RG Stacked

FORCED AIR

Specifications and Ordering Information

kW	Volts 3 Ph	Amps	BTUH	HP	CFM	Temp. Rise of F	Model	Stock	PCN	Dimensions (In.)			Wt. (Lbs)
										W	L	H	
30	480	37.2	102,360	1	1100-2700	35-88	SDRA-30-43RG	S	295742	35.75	45.75	34.5	150
30	600	30.0	102,360	1	1100-2700	35-88	SDRA-30-93RG	NS	295750	35.75	45.75	34.5	150
48	480	58.9	163,776	1	1100-2700	59-141	SDRA-48-43RG	NS	295769	35.75	45.75	34.5	160
48	600	47.3	163,776	1	1100-2700	59-141	SDRA-48-93RG	NS	295777	35.75	45.75	34.5	160
60	480	73.3	204,720	1	1100-2700	70-172	SDRA-60-43RG	S	295785	35.75	45.75	34.5	170
60	600	58.9	204,720	1	1100-2700	70-172	SDRA-60-93RG	NS	295793	30.25	45.75	34.5	170

Stock Status: S = stock AS = assembly stock NS = non-stock
To Order—Specify model, PCN, kW, volts, phase and quantity.

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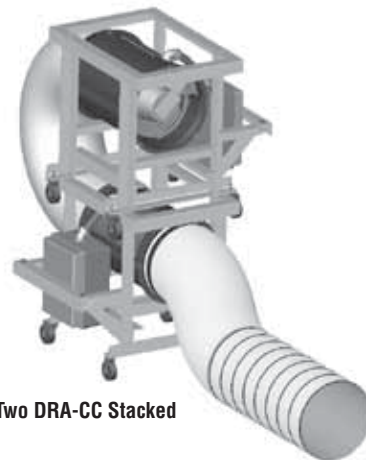
Portable High Temperature Blower Heater *(cont'd.)*

Model DRA-CC
ChromaCube Portable Heating System for Use with Customer Supplied Air Source



Description

The DRA-CC series of SuperDragons have the same construction features as the rental grade units except do not include the blower section. The units require customer supplied air via 20" diameter flexible duct. The control circuit includes an air flow switch to protect



Two DRA-CC Stacked

the heater in case of a restricted or loss of air flow. The control enclosure includes a contactor(s), control transformer, power fusing and power on pilot lights.

Specifications and Ordering Information

kW	Volts 3 Ph	Amps	BTUH	CFM	Temp. Rise oF	Model	Stock	PCN	Dimensions (In.)			Wt. (Lbs)
									W	L	H	
30	480	36.1	102,360	1100-2700	35-88	SDRA-CC-30-43	NS	295806	35.75	45.75	34	115
30	600	28.9	102,360	1100-2700	35-88	SDRA-CC-30-93	NS	295814	35.75	45.75	34	115
48	480	57.8	163,776	1100-2700	59-141	SDRA-CC-48-43	NS	295822	35.75	45.75	34	125
48	600	46.2	163,776	1100-2700	59-141	SDRA-CC-48-93	NS	295830	35.75	45.75	34	125
60	480	72.2	204,720	1100-2700	70-172	SDRA-CC-60-43	NS	295849	35.75	45.75	34	135
60	600	57.8	204,720	1100-2700	70-172	SDRA-CC-60-93	NS	295857	35.75	45.75	34	135

Stock Status: S = stock AS = assembly stock NS = non-stock
To Order—Specify model, PCN, kW, volts, phase and quantity.

Accessories



AD-16 Adjustable Damper

The adjustable damper can be attached to the intake side of the SuperDragon heaters to reduce the amount of airflow to insure the required air temperature is realized. This is especially important when the unit will be used without flexible duct.

Model	Description	Stock	PCN	Wt. (lbs)
AD-16	Adjustable Damper	S	295902	12



Duct Adapter Ring

Provides a means to attach 20" flexible duct to the intake or outlet of the SuperDragon series heaters. Two are required if using duct on the inlet and outlet for applications where air is recirculated.

Model	Description	Stock	PCN	Wt. (lbs)
DAR-20	20" Duct Adaptor	S	295873	20



Flexible Duct Splice

The flexible duct splice is designed to splice two or more 25' lengths of flexible duct to create longer lengths.

Model	Description	Stock	PCN	Wt. (lbs)
FDS-20	20" Dia. Duct Splice Kit	NS	295881	40

Duct Clamp (not shown)

Stainless steel band is designed to fit over the flexible duct for a secure attachment to the adapter ring or flexible duct splice.

Model	Description	Stock	PCN	Wt. (lbs)
DC-20	20" Dia. Duct Clamp	S	295890	3



FX-20 Flexible Duct

Chromalox heavy duty, flexible duct is constructed of 100% polyester based fabric and is 20" diameter and 25' long. It is made to resist wear and is suitable for temperatures from -40 to 220°F. The duct is internally supported with a steel wire helix and can be used on the air intake end of the heater and will not collapse under the negative pressure.

Model	Description	Stock	PCN	Wt. (lbs)
FX-20	20" Dia. Flexible Duct 25'	S	295865	45