

# ROTRON® Regenerative Blowers

## DR 404 / 454 / 505 / 513 / 656

### Regenerative Spa Blower Designed for Commercial Spa Agitation

#### FEATURES

- Manufactured in the USA – ISO 9001 compliant
- CE compliant – Declaration of Conformity on file
- Maximum flow: 105, 127, 160, 200 or 78 SCFM
- Maximum pressure: 56, 58, 74, 69 or 88 IWG
- Standard motor: 1.0, 1.5, 2.0, 3.0 HP, Spa Duty ODP
- Cast aluminum blower housing, impeller & cover; cast iron flanges (threaded)
- UL & CSA approved motor with permanently sealed ball bearings and Class B rated thermal protection
- Inlet & outlet internal muffling
- Quiet operation within OSHA standards

#### MOTOR OPTIONS

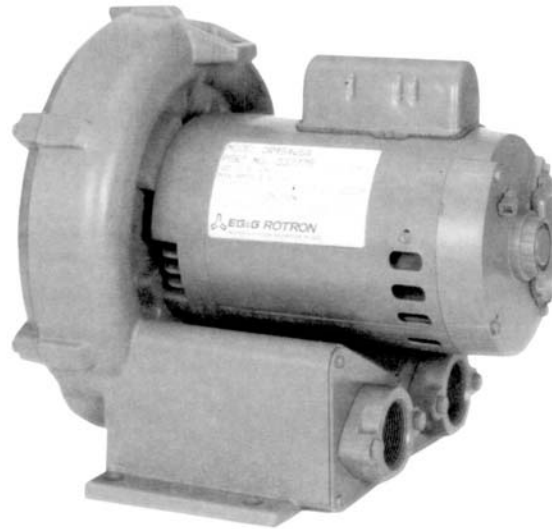
- International voltage & frequency (Hz)
- Chemical duty, high efficiency, inverter duty or industry-specific designs
- Various horsepower for application-specific needs

#### BLOWER OPTIONS

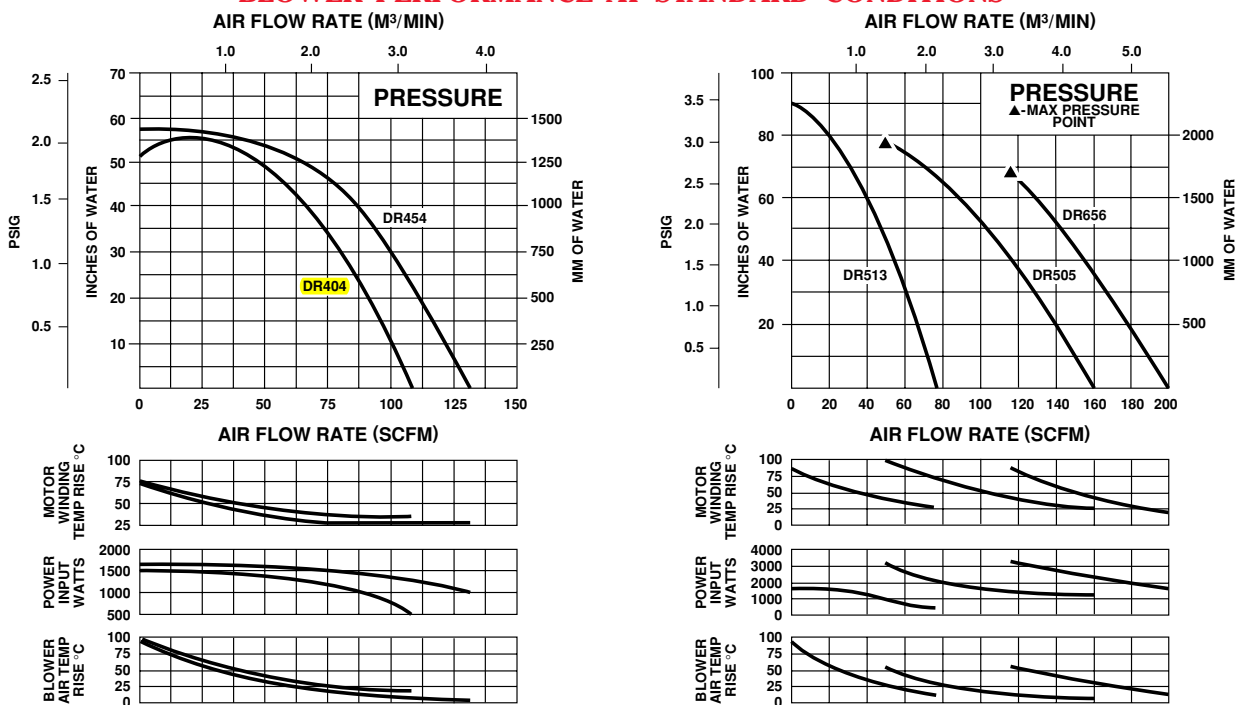
- Corrosion resistant surface treatments & sealing options
- Remote drive (motorless) models
- Slip-on or face flanges for application-specific needs

#### ACCESSORIES (See Catalog Accessory Section)

- Flowmeters reading in SCFM
- Filters & moisture separators
- Pressure gauges, vacuum gauges & relief valves
- Switches – air flow, pressure, vacuum or temperature
- External mufflers for additional silencing
- Variable frequency drive package



#### BLOWER PERFORMANCE AT STANDARD CONDITIONS

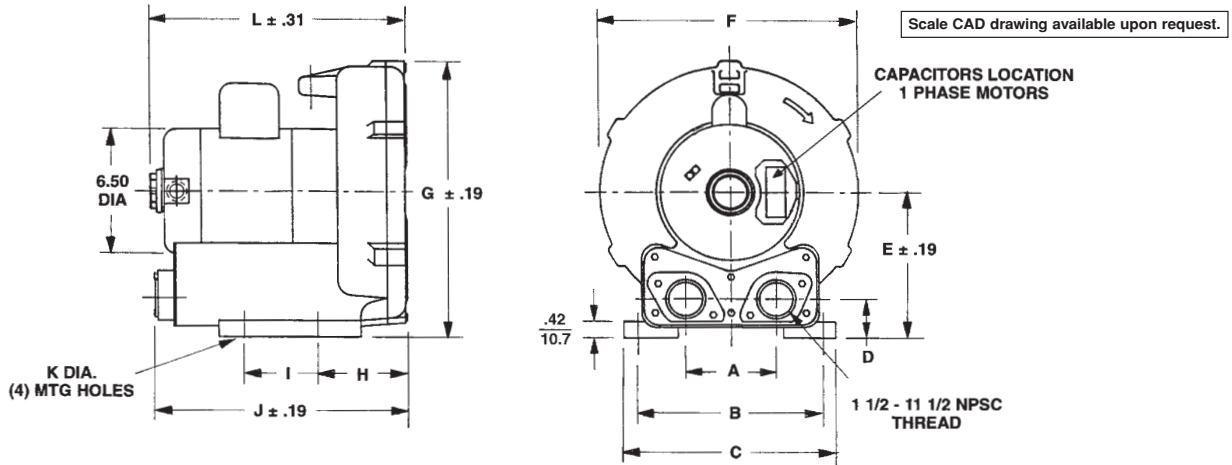


Rev. 2/04

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### Designed for Commercial Spa Agitation Regenerative Spa Blower



DIMENSIONS:  $\frac{IN}{MM}$   
 TOLERANCES:  $.XX \pm \frac{.08}{2}$   
 $.XXX \pm \frac{.030}{.800}$   
 (UNLESS OTHERWISE NOTED)

Dimensions (in/mm)												
MODEL	A	B	C	D	E	F	G	H	I	J	K	L
DR404AQ58M	4.75	10.30	11.48	1.92	6.93	12.55	13.57	3.21	4.50	12.52	0.59	14.53
	120.7	261.2	291.2	48.8	177.3	318.8	344.7	81.5	11.4	318.0	15.0	369.1
DR454V58	4.75	10.30	11.38	1.92	6.98	12.55	13.52	3.25	4.50	10.81	0.593	14.45
	120.7	261.6	289.0	48.8	177.3	318.8	343.4	82.6	114.3	275.6	15.1	367.0
DR505AW58M	4.75	10.30	11.70	1.87	7.26	13.53	14.38	3.56	4.50	14.31	0.593	15.29
	120.7	261.6	297.2	47.5	184.4	343.7	365.3	90.4	114.3	363.0	15.1	388.4
DR513V58	4.75	11.31	13.06	2.23	8.69	14.21	15.80	3.72	5.50	13.74	0.593	14.58
	120.7	287.0	331.7	56.6	220.7	360.9	401.3	94.5	139.7	349.0	15.1	370.3
DR656L5M	4.92	11.42	12.80	2.01	7.96	14.49	15.72	3.90	5.50	14.99	0.593	15.51
	124.0	290.0	325.1	51.1	202.2	368.1	399.3	99.1	139.7	380.7	15.1	394.0

## SPECIFICATIONS

FOR 3 PHASE MODELS, USE FULL CATALOG SECTION B

MODEL	DR404AQ58M	DR454V58M	DR505AW58M	DR513V58 <sup>5</sup>	DR656L5M <sup>5</sup>
Part No.	037778	080485	037935	038143	080605
Motor Enclosure – Shaft Material	SPA (ODP) – CS	SPA (ODP) – CS	SPA (ODP) – CS	SPA (ODP) – CS	SPA (ODP) – CS
Horsepower	1.0	1.5	2.0	1.5	3.0
Voltage <sup>1</sup>	115/230	115/230	115/230	115/230	230
Phase – Frequency <sup>1</sup>	Single - 50/60 Hz	Single - 50/60 Hz	Single - 50/60 Hz	Single - 50/60 Hz	Single - 50/60 Hz
Insulation Class <sup>2</sup>	F	F	F	F	F
NEMA Rated Motor Amps	9.8/4.9	15.2/7.6	17.6/8.8	15.2/7.6	14.0
Service Factor	1.4	1.3	1.2	1.3	1.2
Locked Rotor Amps	32/16	85/43	106/53	85/43	76.0
Max. Blower Amps <sup>3,4</sup>	13/6.5	17/8.5	26/13	17/8.5	15.4
Recommended NEMA Starter Size	0/00	1/0	1/0	1/0	1.5/1
Shipping Weight	64 lb (29 kg)	76 lb (35 kg)	83 lb (38 kg)	90 lb (41 kg)	98 lb (45 kg)
Recommended Number of Jets	3-6	5-10	5-10	12-17	8-12

<sup>1</sup> Rotron motors are designed to handle a broad range of world voltages and power supply variations. Our dual voltage 3 phase motors are factory tested and certified to operate on both: **208-230/415-460 VAC-3 ph-60 Hz** and **190-208/380-415 VAC-3 ph-50 Hz**. Our dual voltage 1 phase motors are factory tested and certified to operate on both: **104-115/208-230 VAC-1 ph-60 Hz** and **100-110/200-220 VAC-1 ph-50 Hz**. All voltages above can handle a ±10% voltage fluctuation. Special wound motors can be ordered for voltages outside our certified range.

<sup>2</sup> Maximum operating temperature: Motor winding temperature (winding rise plus ambient) should not exceed 140°C for Class F rated motors or 120°C for Class B rated motors. Blower outlet air temperature should not exceed 140°C (air temperature rise plus inlet temperature). Performance curve maximum pressure and suction points are based on a 40°C inlet and ambient temperature. Consult factory for inlet or ambient temperatures above 40°C.

<sup>3</sup> Maximum blower amps corresponds to the performance point at which the motor or blower temperature rise with a 40°C inlet and/or ambient temperature reaches the maximum operating temperature.

<sup>4</sup> Note: The blowers should not be stopped/started more than four times an hour.

<sup>5</sup> Use of a relief valve is recommended.

Specifications subject to change without notice. Please consult your Local Field Sales Engineer for specification updates.

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