

## RVFD-SERIES, VARIABLE FREQUENCY DRIVE/NEMA 4X ENCLOSURE

(877) 794-1802

## VFD HP (HORSEPOWER) SELECTION GUIDELINES

VFD SELECTION CRITERIA (VFD HP TO PUMP MOTOR HP)
FOR VARIOUS APPLICATION SCENARIOS:

- 1. WHEN USING A VFD (3-PHASE PUMP MOTOR) AS A SOFT START DEVICE OR IN CONJUNCTION WITH A WIND CONTROL (FOR LOWERING SPRAY HEIGHT):
  SELECT A VFD HP RATING = TO THE PUMP HP MOTOR RATING
- 2. WHEN USING A VFD (3-PHASE PUMP MOTOR) FOR NOZZLE SEQUENCING AND/OR MULTIPLE SPRAY HEIGHT VARATIONS:

SELECT A VFD HP RATING ONE HP SIZE GREATER THAN PUMP MOTOR HP RATING

- 3. WHEN USING A VFD AS A PHASE CONVERTER, (SINGLE PHASE TO THREE PHASE): SELECT A VFD HP RATING TWO HP SIZES GREATER THAN PUMP MOTOR HP RATING
- 4. WHEN USING A VFD AS A PHASE CONVERTER, (SINGLE PHASE TO THREE PHASE) AND FOR SEQUENCING, WITH MULTIPLE SPEED VARIATIONS:

  SELECT A VFD HP RATING THREE HP SIZES GREATER THAN PUMP HP RATING



TYPICAL UNIT SHOWN







**NEMA 4X ENCLOSURE** 

NEMA 4X									
MODEL#	200-230VAC 3Ph HP	Kw	OUTPUT CURR. 230V.	WT. (lbs.)	MODEL#	380-460VAC 3Ph HP	Kw	OUTPUT CURR. 460V.	WT. (lbs.)
RVFD-300	3	2.2	9.6	8.5	RVFD-300-460	3	2.2	4.8	8.5
RVFD-500	5	4.0	15.2	14	RVFD-500-460	5	4.0	7.6	14
RVFD-750	7 1/2	5.5	22	14	RVFD-750-460	7 1/2	5.5	11	14
RVFD-1000	10	7.5	28	29.5	RVFD-1000-460	10	7.5	14	14
RVFD-1500	15	11	42	29.5	RVFD-1500-460	15	11	21	29.5
RVFD-2000	20	15	54	50	RVFD-2000-460	20	15	27	29.5
RVFD-2500	25	18.5	68	50	RVFD-2500-460	25	18	34	29.5
		·		·	RVFD-3000-460	30	22	40	29.5
		·		·	RVFD-4000-460	40	30	52	50

SPECIFICATION DATA: Variable Frequency (Motor Speed) Drive with NEMA 4X Enclosure, integrated digital setting dial, safety stop function, integrated brake "chopper" circuit, frequency search function, 'dancer' control allows position signal to control roll tension, optimum excitation control, password function for parameter setting protection, MODBUS RTU standard via RJ45 port, 150% torque @ 1Hz and 200% torque at 3Hz. using general purpose magnetic flux vector control.

NOTES: 1. Size of VFD will depend on Pump Motor HP (Horsepower), Available Power and Intended Application (See <u>'Selection</u> Guidelines' Table, Above). Contact factory for dimensional data for unit selected.

2. Due to continuing product improvement program, Roman Fountains reserves the right to change the specifications without notice.

DRAWING NO.

R2\_02-13-20

QTY.