

## SPS-RV STANDARD PUMP STARTER REDUCED VOLTAGE

Integrated electronic pump protection overload, a wide range of voltage acceptance (200-600 VAC), and hp-rated contactor bypass.  
 3Ø, 50/60 Hz, 200-600 VAC, 2-75 hp

### ELECTRONIC PROTECTION & AUTOMATION I/O

- Wide-range, Class 10 electronic overload
- Current phase unbalance protection
- Locked rotor / stall protection
- Cycle fault protection
- Accepts 200-600 VAC directly, true plug and play
- Voltage auto-run input
- Dry contact auto-run input
- Status relay output
- Hand/Off/Auto keypad with LEDs for mode, fault, and run indication

### SOFT STARTER FEATURES

- Full horsepower-rated bypass contactor
- Across-the-line start for emergency situations
- Adjustable current limit, start/stop voltage, and start/stop time
- SCR over-temperature detection
- Shorted SCR detection

### OPTIONAL CIRCUIT BREAKER DISCONNECT\*

- UL 489 circuit breaker provides branch and short circuit protection
- No fuses required – saves time and money
- Lockable handle for safety

*\*Service entrance rated*

### INDUSTRIAL GRADE CONSTRUCTION

- Door mounted HOA keypad
- Housed in an outdoor rated, gasketed, NEMA 3R enclosure
- NEMA rated bypass contactor features 2.5 million electrical cycles at full rated current, nearly twice the life as our competitors\*

*\*These comparisons are based on published marketing information from manufacturers.*



## SPS-RV STANDARD PUMP STARTER REDUCED VOLTAGE - ORDERING & SIZING INFORMATION

### STANDARD PUMP STARTER REDUCED VOLTAGE

3-Phase, 50/60 Hz, 200-600 VAC, NEMA Type 3R Enclosed - Combination Soft Starter. Includes Service Entrance Circuit Breaker Disconnect

Model No.	200 V - 460 V SFA Range** (A)	600 V SFA Range** (A)	3-PHASE HP (UL) / Max. SFA**								Contactor NEMA Size
			200 V		230 V		460 V		600 V		
			HP	SFA	HP	SFA	HP	SFA	HP	SFA	
SPS3R-RV-S1-J-G15	6-8	6-8	2	8	2	8	5	8	5	8	1
SPS3R-RV-S1-J-G20	8-11	8-11	3	11	3	11	7.5	11	10	11	
SPS3R-RV-S1-J-G30	11-17	11-17	3	17	5	17	10	17	15	17	
SPS3R-RV-S1-J-G40	16-22	16-22	5	22	7.5	22	15	22	20	22	
SPS3R-RV-S1P-J-G50	20-28	20-28	7.5	28	10	28	20	28	25	28	1+
SPS3R-RV-S1P-J-G60	24-34	24-32	10	34	10	34	25	34	30	32	
SPS3R-RV-S2-J-G80	32-45	32-45	10	45	15	45	30	45	40	45	2
SPS3R-RV-S3-J-G100	40-57	40-57	15	57	20	57	40	57	50	57	3
SPS3R-RV-S3-J-G125	50-71	50-71	20	71	25	71	50	71	60	71	
SPS3R-RV-S3P-J-G150	60-85	60-77	25	85	30	85	60	85	75	77	3+

**\*\*Use SFA Range or Max. SFA when sizing for submersible motor applications. If an amperage value for SFA is not published on the motor nameplate, consider SFA range to be FLA range.**

### STANDARD PUMP STARTER REDUCED VOLTAGE

3-Phase, 50/60 Hz, 200-600 VAC, NEMA Type 3R Enclosed - Standard Soft Starter. Disconnect not Included

Model No.	200 V - 460 V SFA Range** (A)	600 V SFA Range** (A)	3-PHASE HP (UL) / Max. SFA**								Contactor NEMA Size
			200 V		230 V		460 V		600 V		
			HP	SFA	HP	SFA	HP	SFA	HP	SFA	
SPS3R-RV-S00-J	1-DPV*	1-9	2	7.8	2	9	5	7.6	7.5	9	00
SPS3R-RV-S0-J	6-DPV*	6-17	5	17.5	5	18	10	14	15	17	0
SPS3R-RV-S1-J	10-DPV*	10-27	7.5	25.3	10	28	20	27	25	27	1
SPS3R-RV-S1P-J	20-40	20-32	10	40	10	40	30	40	30	32	1+
SPS3R-RV-S2-J	30-50	30-50	15	50	15	50	30	50	40	50	2
SPS3R-RV-S3P-J	45-85	45-77	25	85	30	85	60	85	75	77	3+

\*DPV = Differs per voltage

**\*\*Use SFA Range or Max. SFA when sizing for submersible motor applications. If an amperage value for SFA is not published on the motor nameplate, consider SFA range to be FLA range.**

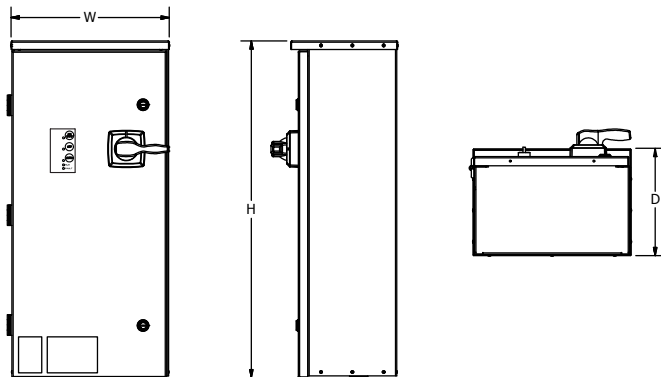
### OPTIONS (FACTORY INSTALLABLE)

Model No.	Description
SPS-SRG240	Surge Suppressor, 200/230 V
SPS-SRG480	Surge Suppressor, 460 V
SPS-SRG600	Surge Suppressor, 600 V

## SPS-RV STANDARD PUMP STARTER REDUCED VOLTAGE - DIMENSIONS & WIRING DIAGRAM

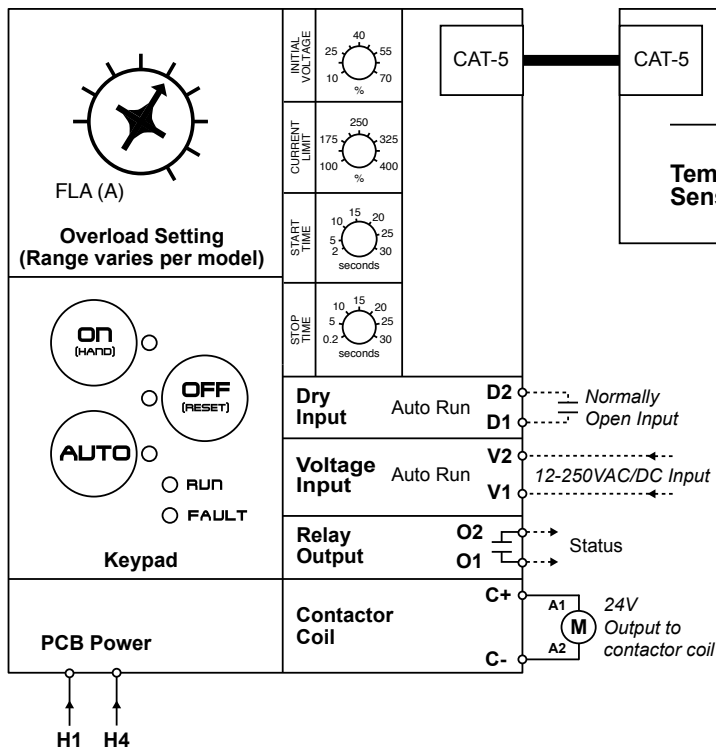
### DIMENSIONS

Combination Soft Starter	Dimensions (in)		
	H	W	D
SPS3R-RV-S1-J-GXX	22	15	10
SPS3R-RV-S1P-J-GXX			
SPS3R-RV-S2-J-GXX			
SPS3R-RV-S3-J-GXXX	32	15	10
SPS3R-RV-S3P-J-GXXX			
Standard Soft Starter	H	W	D
SPS3R-RV-S00-J	22	15	10
SPS3R-RV-S0-J			
SPS3R-RV-S1-J			
SPS3R-RV-S1P-J			
SPS3R-RV-S2-J			
SPS3R-RV-S3P-J			

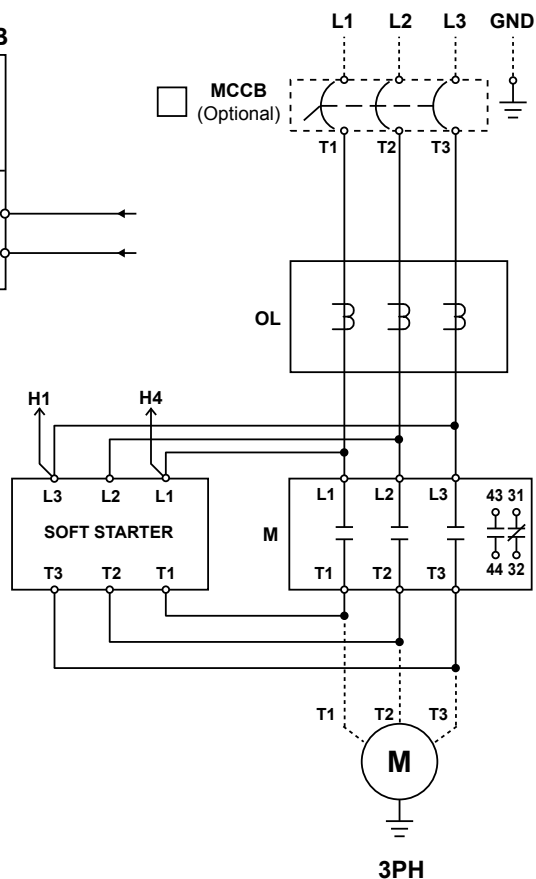


### WIRING DIAGRAM

#### SPS-RV CONTROL WIRING



#### 200-600VAC Input



NOTE: standard wiring schematic shown, actual product wiring may vary depending on options selected. Dashed lines indicate field wiring.

## SPS-RV STANDARD PUMP STARTER REDUCED VOLTAGE - SPECIFICATIONS

### SPECIFICATIONS

Soft Starter Type		
Standard or combination (service rated, suitable for use as a service disconnect)		
NEMA Type 3R Enclosed		
User Interface		
Settings Adjustments	Internal	
Hand/Off/Auto	Door mounted keypad	
Standard Control Operations		
Inputs	Voltage Auto	Accepts 12-250 VAC/DC. Applying voltage will send a run command to the starter when in auto mode.
	Dry Contact Auto	Normally open dry contact. When closed, the starter will be commanded to run when in auto mode.
Output	Status Relay	Normally open relay contact, 0.3A @ 125 VAC, 1A @ 24 VAC
Operational	Overload Type	Electronic, I <sup>2</sup> T trip curve
	Power Fail	Restart in last mode (Hand/Off/Auto) with no delay (default)
	Fault Reset	Adjustable: manual (default) or automatic
	Starts	6/hour, 20 seconds max. start time @ 400% FLA, 30 seconds max. start time @ 300% FLA
Environmental		
Ambient Operating Temp	-5 °F to 140 °F (-20 °C to 60 °C)	
Ambient Storage Temp	-5 °F to 185 °F (-20 °C to 85 °C)	
Relative Humidity	5% to 95% non-condensing	
Motor / Soft Starter Protection	Adjustment / Description	Default Setting
Overload Current Setting Range	Differs per model	Per SFA
Overload Trip Class	10	10
Cycle Fault	Always on: trip if cycle rate exceeds 20 starts/minute	On
Current Phase Unbalance	Always on: trips in the event of a current phase unbalance greater than 50%	On
Locked Rotor / Stall	Always on: trips within 0.5 seconds	On
Shorted SCR	Always on: trips upon detection of a shorted SCR or no motor	On
Open SCR	Always on: trips if no current is detected during start-up or bypass	On
SCR Over-Temperature	Always on: trips if the SCR temperature reaches 125 °C	On
Across-the-Line Start	On/Off: allows the user to start the motor across-the-line	Off