

SPS STANDARD PUMP STARTER

50/60 Hz, 1Ø & 3Ø, 120-600 VAC, 1-60 HP; Service-rated circuit breaker disconnect; Adjustable overload with phase loss protection

RUGGED CONSTRUCTION, DEPENDABLE OPERATION

- Simple and functional control with heavy duty HOA switch
- Powder coated metal Type 3R enclosure available with optional pole mounting straps
- Ample space for adding additional controls

MAIN CIRCUIT BREAKER DISCONNECT

- Rated for service entrance
- UL 489 circuit breaker provides branch and short circuit protection
- No fuses required, saving time and money
- Lockable handle for safety
- UL listed for use as service equipment

RELIABLE COMPONENTS FOR LONG LIFE

- 2.5 million contactor electrical cycles at full rated current
- Contactor includes standard 1 N.O. and 1 N.C. auxiliary contacts
- NEMA size rated, available in NEMA sizes 1-5

THERMAL OVERLOAD MOTOR PROTECTION

- Differential phase failure protection
- Ambient temperature compensated: 41 °F - 104 °F (5 °C to 40 °C)
- Reset push button on door eliminates the need to access panel interior

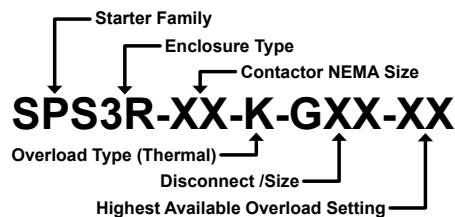
STANDARD CONTROL TRANSFORMER (CPT)

- Multi-tap CPT input accepts all common motor voltages
- Integrated secondary protection—no fuses required
- 120 V control power available for additional field installed devices



PART NUMBER ANATOMY

SPS Starter Part Number Anatomy 120-460VAC



Contactor NEMA Size	Disconnect Sizes: Sized Between 175%-225% of Motor FLA	Highest Available Overload Setting*
S1	15, 20, 30, 40, 50	9, 13, 18, 22, 32
S2	40, 50, 60, 80	22, 36, 36, 50
S3	80, 100, 125, 150	50, 65, 75, 85
S3P	200	100

*Highest Available Overload Setting does not coincide with the max SFA that the starter can handle. The max allowable SFA of the starter is determined by a combination of the disconnect size and contactor ratings.

SPS STANDARD PUMP STARTER - ORDERING & SIZING INFORMATION

STANDARD PUMP STARTER

Standard Pump Starter (Combination) 120–460 V UL/NEMA 3R Enclosures (Thermal Overload)

Model No.	UL HP / MAX SF AMPS**										Overload Adjustment Range	Contactor NEMA Size	Wt. (lbs)	Description
	Single-Phase		Three-Phase Description											
	120 V		230 V*		200 V		230 V		460 V					
SPS3R-S1-K-G15-9	1/3 HP	8 A	1 HP	8 A	2 HP	8 A	2 HP	8 A	5 HP	8 A	6-9 A	1	44	N3R SPS, S1, 8A, w/ HOA, TOL, CB Disc., & 50VA CPT
SPS3R-S1-K-G20-13	1/2 HP	11 A	1.5 HP	11 A	3 HP	11 A	3 HP	11 A	7.5 HP	11 A	9-13 A			N3R SPS, S1, 11A, w/ HOA, TOL, CB Disc., & 50VA CPT
SPS3R-S1-K-G30-18	1 HP	17 A	3 HP	17 A	-	-	5 HP	17 A	10 HP	17 A	12-18 A			N3R SPS, S1, 17A, w/ HOA, TOL, CB Disc., & 50VA CPT
SPS3R-S1-K-G40-22	1.5 HP	22 A	-	-	5 HP	16.7 A	7.5 HP	22 A	15 HP	22 A	16-22 A			N3R SPS, S1, 22A, w/ HOA, TOL, CB Disc., & 50VA CPT
SPS3R-S1-K-G50-32	2 HP	24 A	5 HP	28 A	7.5 HP	25.3 A	10 HP	28 A	20 HP	27 A	22-32 A			N3R SPS, S1, 28A, w/ HOA, TOL, CB Disc., & 50VA CPT
SPS3R-S2-K-G50-36	2 HP	28 A	5 HP	28 A	7.5 HP	28 A	10 HP	28 A	20 HP	28 A	24-36 A	2	48	N3R SPS, S2, 28A, w/ HOA, TOL, CB Disc., & 50VA CPT
SPS3R-S2-K-G60-36	3 HP	34 A	5 HP	34 A	10 HP	34 A	10 HP	34 A	25 HP	34 A	24-36 A			N3R SPS, S2, 34A, w/ HOA, TOL, CB Disc., & 50VA CPT
SPS3R-S2-K-G80-50	-	-	7.5 HP	45 A	-	-	15 HP	45 A	30 HP	45 A	34-50 A			N3R SPS, S2, 45A, w/ HOA, TOL, CB Disc., & 50VA CPT
SPS3R-S3-K-G100-65	5 HP	57 A	10 HP	57 A	15 HP	57 A	20 HP	57 A	40 HP	57 A	45-65 A	3	64	N3R SPS, S3, 57A, w/ HOA, TOL, CB Disc., & 100VA CPT
SPS3R-S3-K-G125-75	5 HP	68 A	15 HP	68 A	20 HP	68 A	25 HP	68 A	50 HP	68 A	54-75 A			N3R SPS, S3, 68A, w/ HOA, TOL, CB Disc., & 100VA CPT
SPS3R-S3-K-G150-85	7.5 HP	80 A	15 HP	68 A	25 HP	85 A	30 HP	85 A	60 HP	77 A	63-85 A			N3R SPS, S3, 85A, w/ HOA, TOL, CB Disc., & 100VA CPT
SPS3R-S3P-K-G200-100	10 HP	100 A	20 HP	88 A	30 HP	92 A	-	-	75 HP	96 A	80-100 A	3+	66	N3R SPS, S3P, 100A, w/ HOA, TOL, CB Disc. & 100VA

*Must order with option SPS-1PH for single-phase wiring from factory

**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

Standard Pump Starters (Combination) 575 V UL/NEMA 3R Enclosures (Thermal Overload)

Model No.	UL HP / MAX SF AMPS**		Overload Adjustment Range	Contactor NEMA Size	Wt. (lbs)	Description
	Three Phase					
	575 V					
SPS3R-S1-6K-G20-13	10HP	11A	9-13A	1	44	N3R 575V SPS, S1, 11A, w/ HOA, TOL, CB Disc., & 50VA CPT
SPS3R-S1-6K-G30-18	15HP	17A	12-18A			N3R 575V SPS, S1, 17A, w/ HOA, TOL, CB Disc., & 50VA CPT
SPS3R-S1-6K-G40-25	20HP	22A	18-25A			N3R 575V SPS, S1, 22A, w/ HOA, TOL, CB Disc., & 50VA CPT
SPS3R-S1-6K-G50-32	25HP	28A	22-32A			N3R 575V SPS, S1, 28A, w/ HOA, TOL, CB Disc., & 50VA CPT
SPS3R-S2-6K-G60-36	30HP	34A	24-36A			N3R 575V SPS, S2, 34A, w/ HOA, TOL, CB Disc., & 50VA CPT
SPS3R-S2-6K-G80-50	40HP	45A	34-50A	2	48	N3R 575V SPS, S2, 45A, w/ HOA, TOL, CB Disc., & 50VA CPT
SPS3R-S3-6K-G100-65	50HP	57A	45-65A			N3R 575V SPS, S3, 57A, w/ HOA, TOL, CB Disc., & 100VA CPT
SPS3R-S3-6K-G125-75	60HP	71A	54-75A			N3R 575V SPS, S3, 71A, w/ HOA, TOL, CB Disc., & 100VA CPT
SPS3R-S3-6K-G150-85	75HP	77A	63-85A	3	64	N3R 575V SPS, S3, 77A, w/ HOA, TOL, CB Disc., & 100VA CPT

**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.

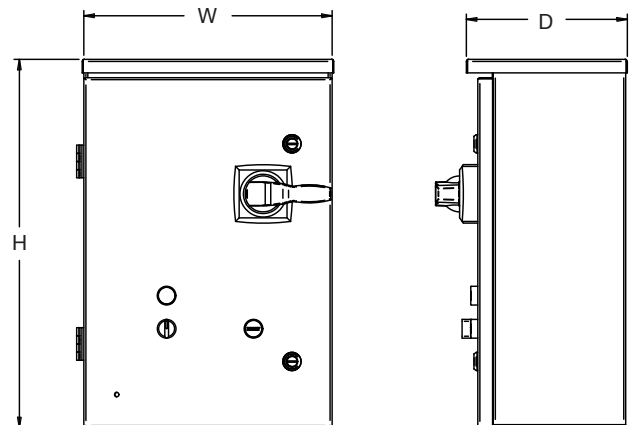
SPS STANDARD PUMP STARTER - DIMENSIONS

OPTIONS (FACTORY INSTALLABLE)

Model No.	Description
SPS-24	24VAC Control Circuit
SPS-3FC	Three Float Switch Input Terminals for Simplex Operation
SPS-BCN	Optional Top Mount Alarm Beacon Light, 120VAC
SPS-1PH	Factory installed single-phase wiring
SPS-BZR	Optional Door Mounted Buzzer, 120VAC w/ Silence Pushbutton
SPS-CLK-120V	Optional 7 Day, 24 Hr Programmable Clock
SPS-CLK-24V	Optional 7 Day, 24 Hr Programmable Clock SPS-FPL
SPS-FPL	Fault Pilot Light
SPS-RLY-120VAC	Factory Installed 120VAC Finder Interposing Run Relay
SPS-RLY-24VAC-DC	Factory Installed 24VAC/VDC Finder Interposing Run Relay
SPS-RPL	Run Pilot Light
SPS-SPB	Start Pushbutton
SPS-SRG240	Surge Suppressor 208-240VAC, delta power configuration
SPS-SRG480	Surge Suppressor 480VAC, delta power configuration
SPS-SRG600	Surge Suppressor 600VAC, delta power configuration

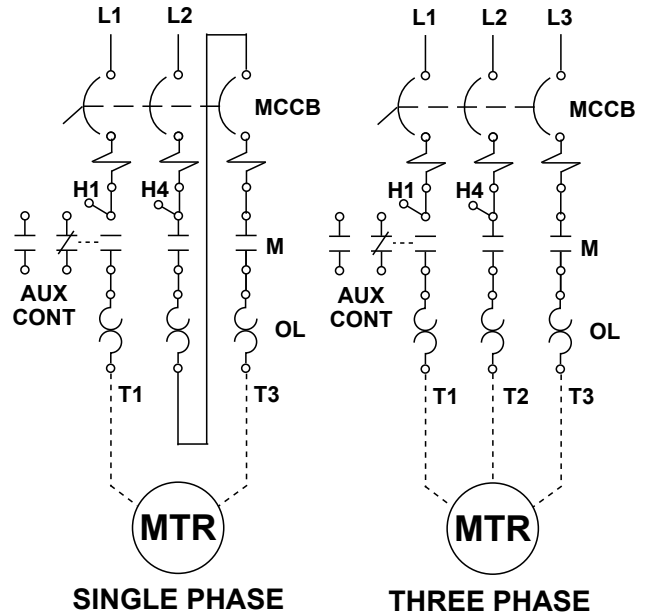
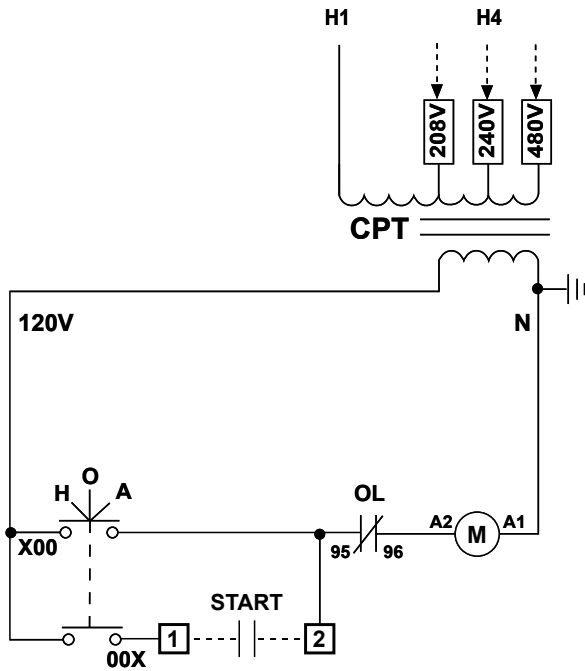
DIMENSIONS

Starter	Dimensions (in)		
	H	W	D
SPS3R-S1-K-GXX-X	22	15	10
SPS3R-S1-K-GXX-XX			
SPS3R-S2-K-GXX-XX			
SPS3R-S3-K-GXXX-XX			
SPS3R-S3P-K-GXXX-XXX	32	15	10
SPS3R-S1-6K-GXX-XX			
SPS3R-S2-6K-GXX-XX			
SPS3R-S3-6K-GXXX-XX			



SPS STANDARD PUMP STARTER - WIRING DIAGRAM & SPECIFICATIONS

WIRING DIAGRAM



SPECIFICATIONS

Starter Type	
Standard Pump Starter	
Combination, Service Rated	
UL Type 3R Enclosure	
User Interface	
HOA Selector Switch	
Reset Push Button	
Standard Control Operations	
Auto Run Input	N.O. dry contact closure to energize starter
Environmental	
Ambient Operating Temp	-5 to 140 °F (-20 to 60 °C)
Ambient Storage Temp	-5 to 185 °F (-20 to 85 °C)
Relative Humidity	5% to 95% non-condensing
Protective Functions	
Overload Type	Thermal bi-metallic
Trip Class	Class 10
Reset	Manual
Phase Loss	Differential overload protection