

# Solid State Switches

## FOR SINGLE PHASE MOTORS

With over 100 years of design and manufacturing experience, Stearns has built a solid reputation for quality and commitment to superior reliability. SINPAC® switches are designed to replace mechanical centrifugal switches for switching between the start and run winding for single phase AC electric motors. These are a reliable solid state replacement of the mechanical switch.

SINPAC® switches are ideal for applications requiring consistent switching of the start circuit in single phase motors. Mechanical switches are prone to various problems including fatigue, contamination, corrosion and vibration that can lead to performance inconsistency. Our switches are the answer to reducing production downtime in hundreds of applications.

### SINPAC® SWITCH MOUNTING LOCATIONS

- External conduit box
- Internal conduit box
- External endbell
- Not affected by shaft up or shaft down motor positions
- Can be mounted remote from the motor

### BENEFITS OF SINPAC® SWITCHES

- Cuts out the start circuit at approximately 80% of synchronous speed
- Start circuit reconnects to reinitiate starting torque when the motor speed drops below 50% of synchronous speed
- Switches will operate in areas susceptible to brown-outs or low voltage
- Designed to filter out electrical noise
- Switches will work on any single-phase motor, reducing the selection time & switch inventory; can be used on new or existing motors
- Will not limit motor performance due to moisture, dust, shock, vibration or over speed



### FEATURES

- Completely Solid-State
- Universally Accepted Design
- Electrically Protected Components
- Line Voltage Compensation
- Transient Protection
- Restart Capability
- Reduced Installation Time
- Environmentally Protected
- Accepted by Motor Manufacturers
- UL Recognition to US & Canadian Standards



# Solid State Switches

FOR SINGLE PHASE MOTORS

## CAPACITOR START



CV



2CV

## CAPACITOR START & RUN



VR



2VR



IR



IVR

Technical Characteristics	Max Motor HP	Switch Rating	Start Circuit	UL Recognized
<b>SINPAC® Series &amp; Motor Type</b>				
CV : Capacitor Start	2 - 3	40 - 50 Amps	115 Volts	File E71115
2CV: Capacitor Start	5	50 Amps	230 Volts	File E71115
VR: Capacitor Start & Run	3	50 Amps	115 Volts	File E71115
2VR: Capacitor Start & Run	5	50 Amps	230 Volts	File E71115
IR: Instant Reverse Capacitor Start	2	40 Amps	115 Volts	File E71115
IVR: Instant Reverse Capacitor Start	3	40 Amps	115 Volts	File E71115

\*Accepted by motor manufacturers & UL recognized

SINPAC® Series	Permissible Max. Start Circuit Current (amps)		Start Circuit Voltage	Cut-out Voltage	Cut-in Voltage	Style	Switch Part Number		Kit Number	
	OBS	RPL*					Obsolete	Replacement	Obsolete	Replacement
CV	16	40	115	130	15	11	4-7-21016-11-UL3	4-7-21040-11-UA3	4-7-21016-11-ULK	4-7-21040-11-UAK
	16	40	115	130	30	11	4-7-21016-11-UA3	4-7-21040-11-UA3	4-7-21016-11-UAK	4-7-21040-11-UAK
	16	40	115	147	37	11	4-7-21016-11-UB3	4-7-21040-11-UB3	4-7-21016-11-UBK	4-7-21040-11-UBK
	16	40	115	165	37	11	4-7-21016-11-U03	4-7-21040-11-U03	4-7-21016-11-U0K	4-7-21040-11-U0K
	25	40	115	130	30	11	4-7-21025-11-UA3	4-7-21040-11-UA3	4-7-21025-11-UAK	4-7-21040-11-UAK
	25	40	115	147	37	11	4-7-21025-11-UB3	4-7-21040-11-UB3	4-7-21025-11-UBK	4-7-21040-11-UBK
	25	40	115	165	37	11	4-7-21025-11-U03	4-7-21040-11-U03	4-7-21025-11-U0K	4-7-21040-11-U0K
	40	50	115	165	37	12	4-7-21S40-12-U03	4-7-21S50-12-U03	4-7-21S40-12-U0K	4-7-21S50-12-U0K
VR	40	50	115	180	50	12	4-7-21040-12-UD3	4-7-21S50-12-UD3	4-7-21040-12-UDK	4-7-21S50-12-UDK
	50	50	115	165	37	12	4-7-21050-12-U03	4-7-21S50-12-U03	4-7-21050-12-U0K	4-7-21S50-12-U0K
	16	50	115	130	30	12	4-7-71016-12-UA3	4-7-71050-12-UA3	4-7-71016-12-UAK	4-7-71050-12-UAK
	16	50	115	147	37	12	4-7-71016-12-UB3	4-7-71050-12-UB3	4-7-71016-12-UBK	4-7-71050-12-UBK
	16	50	115	165	37	12	4-7-71016-12-U03	4-7-71050-12-U03	4-7-71016-12-U0K	4-7-71050-12-U0K
	25	50	115	210	50	12	4-7-71025-12-UV3	4-7-71050-12-UV3	4-7-71025-12-UVK	4-7-71050-12-UVK
	40	50	115	130	30	12	4-7-71040-12-UA3	4-7-71050-12-UA3	4-7-71040-12-UAK	4-7-71050-12-UAK
2CV	35	50	230	310	70	15	4-7-22035-15-U03	4-7-22050-15-U03	4-7-22035-15-U0K	4-7-22050-15-U0K
	35	50	230	260	70	15	4-7-72035-15-UC3	4-7-72050-15-UC3	4-7-72035-15-UCK	4-7-72050-15-UCK
2VR	35	50	230	310	70	15	4-7-72035-15-U03	4-7-72050-15-U03	4-7-72035-15-U0K	4-7-72050-15-U0K
	25	40	115	130	30	15	4-7-51025-15-UA3	4-7-51040-15-UA3	4-7-51025-15-UAK	4-7-51040-15-UAK
IR	25	40	115	130	30	15	4-7-51025-15-U03	4-7-51040-15-U03	4-7-51025-15-U0K	4-7-51040-15-U0K
	25	40	115	165	37	15	4-7-51025-15-U03	4-7-51040-15-U03	4-7-51025-15-U0K	4-7-51040-15-U0K
IVR	40		115	147	33	15	4-7-81040-15-UB3		4-7-81040-15-UBK	

\* RPL is replacement



## Regal Rexnord

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