



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

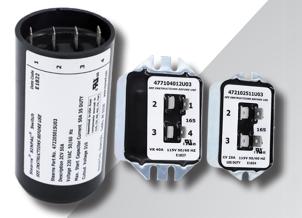
- External conduit box
- Internal conduit box
- External endbell
- Not affected by shaft up or shaft down motor positions
- Can be mounted remote from the motor

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



Capacitor Start









Capacitor Start & Run





CV

2CV

'R 2'

IR

IVR

Technical Characteristics	Max Motor HP	Switch Rating	Start Circuit	UL Recognized
SINPAC® Series & Motor Type				
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

 $^{^{\}ast}$ Accepted by motor manufacturers & UL recognized

SINPAC Series	Max. Cire	issible Start cuit rent nps)	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
	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
VR	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
	40	50	115	147	37	12	4-7-71040-12-UB3	4-7-71050-12-UB3	4-7-71040-12-UBK	4-7-71050-12-UBK
	40	50	115	165	37	12	4-7-71040-12-U03	4-7-71050-12-U03	4-7-71040-12-U0K	4-7-71050-12-U0K
	40	50	115	210	50	12	4-7-71040-12-UV3	4-7-71050-12-UV3	4-7-71040-12-UVK	4-7-71050-12-UVK
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
2VR	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
	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
IR	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
	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 * PPL is assolu	4	0	115	147	33	15	4-7-8104	0-15-UB3	4-7-81040-15-UBK	

^{*} RPL is replacement



