

# Pump Controllers

Pump control panels for outdoor irrigation and oil well applications



Sprecher + Schuh pump control panels are specifically designed to meet Combination starter requirements in demanding outdoor environmental conditions. Typical applications include irrigation and waste water treatment as well as oil well and agricultural applications.

Pump Controllers from Sprecher + Schuh offer through-the-door operators and rugged Type 3R rain-proof metal or Type 4X non-metallic enclosures. These enclosures in some cases are somewhat smaller than previous models but still with adequate room to mount a mechanical timer and other customer supplied controls.

## Three models of Pump Controllers

- **Thermal-magnetic circuit breakers (MCCB)** instead of a motor circuit protector (MCP) to comply with new short-circuit requirements from UL and NEC.
- **Heavy duty fusible or non-fusible L11 or L10 disconnect switches** providing improved short-circuit protection when used with J fuses.
- **Self-protected Combination Controllers (Type E) KTA7** models which offers superior fuseless short-circuit protection in a smaller more economical package (See page F107).

Pump panels feature our CA7 and CA6 line of contactors which are UL Listed and sized to match all the available HP sizes of motors. Alternately, we can provide NEMA Sized (CAN7 and CAN6) contactors, which comply with all requirements by UL and are labeled with the applicable NEMA (00, 0, 1, 2, 3, 4 & 5) size in our pump panels. Our MCCB models and the L11/L10 models utilize the CEP7 solid state overload relay providing state-of-the-art overload and single-phase protection. See Section B in this catalog for a full description of these excellent motor protection relays.



Our KTA7 model utilizes the high speed current limiting capabilities providing short-circuit protection, branch-circuit disconnect, and overload protection in one compact device. See Section F in this catalog for application details for these Type E Combos.

## Standard or Customized Features

Standard pump controllers are equipped with START pushbutton and H-O-A selector switch. The entire assembly is mounted in an outdoor enclosure with provision for mounting on a pole or a wall and top conduit provisions. Oversized enclosures can be provided for each of the pump controllers to accommodate extra equipment. Our factory modification section lists many of the options that are commonly requested. A customized pump controller quotation including door-in-door (dead-front) models, reduced voltage models and models with customized control diagrams can be provided on demand by contacting your Sprecher + Schuh representative.



Starters & Enclosed Prod.  
PUMP

### Series CAPT7 and CAPT6 with Thermal-Magnetic Circuit Breaker

Maximum Horsepower Three Phase			MCCB Amps	Type 3R (M3) Rainproof Metal	D I M	Type 4X (F4) Watertight Corrosion Resistant Non-Metallic	D I M
230V	460V	575V		Catalog No.		Price	
				<b>CAPT</b>		<b>CAPT</b>	
2	5	7.5	15	7-9-*◆-TB15RO	1675 R	7-9-*◆-TB15CO	R/F
3	~	~	15	7-12-*◆-TB15RO	1717 R	7-12-*◆-TB15CO	R/F
~	7.5	10	20	7-12-*◆-TB20RO	1717 R	7-12-*◆-TB20CO	R/F
5	10	~	25	7-16-*◆-TB25RO	1759 R	7-16-*◆-TB25CO	R/F
~	~	15	30	7-16-*◆-TB30RO	1759 R	7-16-*◆-TB30CO	R/F
~	~	15	30	7-23-*◆-TB30RO	1801 R	7-23-*◆-TB30CO	R/F
7.5	15	~	35	7-23-*◆-TB35RO	1801 R	7-23-*◆-TB35CO	R/F
~	~	~	40	7-30-*◆-TB40RO	1926 R	7-30-*◆-TB40CO	R/F
10	20	25	50	7-30-*◆-TB50RO	1926 R	7-30-*◆-TB50CO	R/F
10	~	30	50	7-37-*◆-TB50RO	1968 R	7-37-*◆-TB50CO	R/F
~	25	~	60	7-37-*◆-TB60RO	1968 R	7-37-*◆-TB60CO	R/F
~	~	30	50	7-43-*◆-TB50RO	2010 R	7-43-*◆-TB50CO	R/F
~	30	~	60	7-43-*◆-TB60RO	2219 R	7-43-*◆-TB60CO	R/F
15	~	~	70	7-43-*◆-TB70RO	2219 R	7-43-*◆-TB70CO	R/F
~	40	50	80	7-60-*◆-TB80RO	2345 R	7-60-*◆-TB80CO	R/F
20	~	~	90	7-60-*◆-TB90RO	2345 R	7-60-*◆-TB90CO	R/F
~	50	60	100	7-72-*◆-TB100RO	2387 R	7-72-*◆-TB100CO	R/F
25	~	~	125	7-72-*◆-TB125RO	2889 R	7-72-*◆-TB125CO	R/F
~	~	60	100	7-85-*◆-TB100RO	2429 R	7-85-*◆-TB100CO	R/F
30	60	~	125	7-85-*◆-TB125RO	2931 R	7-85-*◆-TB125CO	R/F
30	75	75	125	7-97-*◆-TB125RO	3051 R	7-97-*◆-TB125CO	R/F
~	75	100	150	6-115-*◆-TB150RO	4690 T	6-115-*◆-TB150CO	R/F
40	~	~	175	6-115-*◆-TB175RO	5025 T	6-115-*◆-TB175CO	R/F
~	~	~	200	6-115-*◆-TB200RO	5025 T	6-115-*◆-TB200CO	R/F
50	100	125	200	6-140-*◆-TB200RO	5528 T	6-140-*◆-TB200CO	R/F
~	~	150	225	6-180-*◆-TB225RO	6030 T	6-180-*◆-TB225CO	R/F
60	125	~	250	6-180-*◆-TB250RO	6030 T	6-180-*◆-TB250CO	R/F
~	150	~	300	6-180-*◆-TB300RO	7286 I	6-180-*◆-TB300CO	R/F
75	150	200	300	6-210-EI-*◆-TB300RO	9045 I	6-210-EI-*◆-TB300CO	R/F
~	~	~	350	6-250-EI-*◆-TB350RO	10050 I	6-250-EI-*◆-TB350CO	R/F
100	200	250	400	6-250-EI-*◆-TB400RO	10050 I	6-250-EI-*◆-TB400CO	R/F
~	~	300	450	6-300-EI-*◆-TB450RO	10888 I	6-300-EI-*◆-TB450CO	R/F
125	250	~	500	6-300-EI-*◆-TB500RO	10888 I	6-300-EI-*◆-TB500CO	R/F
~	300	400	600	6-420-EI-*◆-TB600RO	12060 I	6-420-EI-*◆-TB600CO	R/F
175	350	~	700	6-420-EI-*◆-TB700RO	15075 J	6-420-EI-*◆-TB700CO	R/F

Larger sizes available. Contact your Sprecher + Schuh representative.

**NOTE:** Catalog Numbers, list Prices and enclosure dimensions reflect contactors with AC coils. For DC coils, select Coil Code from the DC Coil Code table on page C86 and follow the instructions for modifying Catalog Numbers and list Prices.

### Ordering Instructions

Specify Catalog Number	
Replace (*) with Coil Code	See page C86
Replace (◆) with O/L Relay	See pages C87-C88
Factory Modifications available	See pages C89-C92

### Pump Panel with Circuit Breaker includes:

- Contactor (with AC coil)
- Overload relay protection
- Thermal magnetic circuit breaker
- "START" momentary pushbutton
- "H-O-A" selector switch
- At minimum, 6"x10" extra back pan space
- UL type rated enclosure



CAPT7-23...

Starters & Enclosed Prod. PUMP

R/F - Experience has shown that applications using non-metallic enclosures often require customized pump panels (i.e. Door-in-Door or unique control circuits). Contact your Sprecher + Schuh representative for a customized price.

① Dimensional information starts on page C108.

#### Series CAPT7 and CAPT6 with Fusible Disconnect (J-Type) ②③

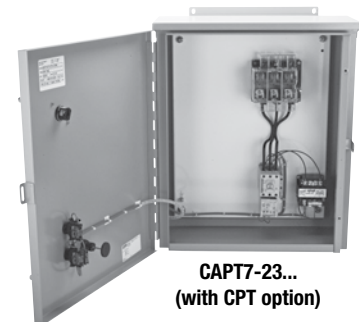
Maximum Horsepower Three Phase			Fuse Clips	Type 3R (M3) Rainproof Metal	D I M	Type 4X (F4) Watertight Corrosion Resistant Non-metallic	D I M
230V	460V	575V		Catalog No.		Price ①	
				<b>CAPT</b>		<b>CAPT</b>	
2	5	7.5	30	7-9-*◆-JF61RO	1549 R	7-9-*◆-JF61CO	R/F
3	7.5	10	30	7-12-*◆-JF61RO	1591 R	7-12-*◆-JF61CO	R/F
5	10	15	30	7-16-*◆-JF61RO	1633 R	7-16-*◆-JF61CO	R/F
~	~	~	30	7-23-*◆-JF61RO	1675 R	7-23-*◆-JF61CO	R/F
7.5	15	15	60	7-23-*◆-JF62RO	1759 R	7-23-*◆-JF62CO	R/F
10	20	25	60	7-30-*◆-JF62RO	1884 R	7-30-*◆-JF62CO	R/F
10	25	30	60	7-37-*◆-JF62RO	1926 R	7-37-*◆-JF62CO	R/F
~	30	30	60	7-43-*◆-JF62RO	1968 R	7-43-*◆-JF62CO	R/F
15	~	~	100	7-43-*◆-JF63RO	2554 R	7-43-*◆-JF63CO	R/F
20	40	50	100	7-60-*◆-JF63RO	2680 R	7-60-*◆-JF63CO	R/F
25	50	60	100	7-72-*◆-JF63RO	2722 R	7-72-*◆-JF63CO	R/F
~	~	60	100	7-85-*◆-JF63RO	2764 R	7-85-*◆-JF63CO	R/F
30	60	~	200	7-85-*◆-JF64RO	3685 H	7-85-*◆-JF64CO	R/F
30	75	75	200	7-97-*◆-JF64RO	3805 H	7-97-*◆-JF64CO	R/F
40	75	100	200	6-115-*◆-JF64RO	5193 H	6-115-*◆-JF64CO	R/F
50	100	125	200	6-140-*◆-JF64RO	5528 H	6-140-*◆-JF64CO	R/F
60	150	150	400	6-180-*◆-JF65RO	7538 J	6-180-*◆-JF65CO	R/F
75	150	200	400	6-210-EI-*◆-JF65RO	9045 J	6-210-EI-*◆-JF65CO	R/F
100	200	250	400	6-250-EI-*◆-JF65RO	10385 J	6-250-EI-*◆-JF65CO	R/F

Larger sizes available. Contact your Sprecher + Schuh representative.

**NOTE:** Catalog Numbers, list Prices and enclosure dimensions reflect contactors with AC coils. For DC coils, select Coil Code from the DC Coil Code table on page C86 and follow the instructions for modifying Catalog Numbers and list Prices.

#### Pump Panel with Disconnect Switch includes:

- Contactor (with AC coil)
- Overload relay protection
- J-type fusible disconnect switch (excluding line fuses)
- "START" momentary pushbutton
- "H-O-A" selector switch
- At minimum, 6"x10" extra back pan space
- UL type rated enclosure



CAPT7-23...  
(with CPT option)

**R/F** - Experience has shown that applications using non-metallic enclosures often require customized pump panels (i.e. Door-in-Door or unique control circuit). Contact your Sprecher + Schuh representative for a customized price.

#### Ordering Instructions

Specify Catalog Number	
Replace (*) with Coil Code	See page C86
Replace (◆) with O/L Relay	See pages C87-C88
Factory Modifications available	See pages C89-C92

- ① Dimensional information starts on page C108.
- ② Fusible combo starters use the L11 or L10 Disconnect. Fuse clips accept "J" type fuses. Power fuses not supplied.
- ③ A Red and Yellow Handle may be selected instead of the standard Gray and Black handle. Change "JF" to "LF" in catalog number.

### Series CAPTN7 and CAPTN6 with Thermal-Magnetic Circuit Breaker

NEMA Size	Maximum Horsepower Three Phase			MCCB Amps	Type 3R (M3) Rainproof Metal	Price	D I M	Type 4X (F4) Watertight Corrosion Resistant Non-Metallic	Price	D I M
	230V	460V	575V		Catalog No.			① Catalog No.		
					<b>CAPTN</b>			<b>CAPTN</b>		
<b>00</b>	1/2	2	2	15	7-12-*◆-TB15RO	1717	R	7-12-*◆-TB15CO	R/F	
<b>0</b>	3	5	5	15	7-16-*◆-TB15RO	1759	R	7-16-*◆-TB15CO	R/F	
<b>1</b>	7-1/2	~	~	35	7-37-*◆-TB35RO	1968	R	7-37-*◆-TB35CO	R/F	
	~	10	~	25	7-37-*◆-TB25RO	1968	R	7-37-*◆-TB25CO	R/F	
	~	~	10	20	7-37-*◆-TB20RO	1968	R	7-37-*◆-TB20CO	R/F	
<b>2</b>	15	~	~	70	7-43-*◆-TB70RO	2219	R	7-43-*◆-TB70CO	R/F	
	~	25	~	60	7-43-*◆-TB60RO	2219	R	7-43-*◆-TB60CO	R/F	
	~	~	25	50	7-43-*◆-TB50RO	2210	R	7-43-*◆-TB50CO	R/F	
<b>3</b>	30	~	~	125	7-85-*◆-TB125RO	2931	R	7-85-*◆-TB125CO	R/F	
	~	50	~	100	7-85-*◆-TB100RO	2429	R	7-85-*◆-TB100CO	R/F	
	~	~	50	80	7-85-*◆-TB80RO	2387	R	7-85-*◆-TB80CO	R/F	
<b>4</b>	50	100	~	200	6-180-*◆-TB200RO	6030	T	6-180-*◆-TB200CO	R/F	
	~	~	100	150	6-180-*◆-TB150RO	5779	T	6-180-*◆-TB150CO	R/F	
<b>5</b>	100	200	~	400	6-300-EI-*◆-TB400RO	10385	I	6-300-EI-*◆-TB400CO	R/F	
	~	~	200	300	6-300-EI-*◆-TB300RO	10385	I	6-300-EI-*◆-TB300CO	R/F	

### Pump Panel with NEMA label includes:

- NEMA labeled contactor (with AC coil)
- Overload relay protection
- Appropriate disconnect means thermal magnetic circuit breaker) or J-type fusible disconnect switch (excluding line fuses)
- "START" momentary push-button
- "H-O-A" selector switch
- At minimum, 6"x10" extra back pan space
- UL type rated enclosure

### Series CAPTN7 and CAPTN6 with Fusible Disconnect (J-Type) ②③

NEMA Size	Maximum Horsepower Three Phase			Fuse Clips	Type 3R (M3) Industrial Dusttight	Price	D I M	Type 4X (F4) Watertight Corrosion Resistant Non-Metallic	Price	D I M
	230V	460V	575V		Catalog No.			① Catalog No.		
					<b>CAPTN</b>			<b>CAPTN</b>		
<b>00</b>	1-1/2	2	2	30	7-12-*◆-JF61RO	1591	R	7-12-*◆-JF61CO	R/F	
<b>0</b>	3	5	5	30	7-16-*◆-JF61RO	1633	R	7-16-*◆-JF61CO	R/F	
<b>1</b>	7-1/2	~	~	60	7-37-*◆-JF62RO	1926	R	7-37-*◆-JF62CO	R/F	
	~	10	10	30	7-37-*◆-JF61RO	1843	R	7-37-*◆-JF61CO	R/F	
<b>2</b>	15	~	~	100	7-43-*◆-JF63RO	2554	R	7-43-*◆-JF63CO	R/F	
	~	25	25	60	7-43-*◆-JF62RO	1968	R	7-43-*◆-JF62CO	R/F	
<b>3</b>	30	~	~	200	7-85-*◆-JF64RO	3685	H	7-85-*◆-JF64CO	R/F	
	~	50	50	100	7-85-*◆-JF63RO	2764	H	7-85-*◆-JF63CO	R/F	
<b>4</b>	50	100	100	200	6-180-*◆-JF64RO	6365	H	6-180-*◆-JF64CO	R/F	
<b>5</b>	100	200	200	400	6-300-EI-*◆-JF65RO	10720	J	6-300-EI-*◆-JF65CO	R/F	

**NOTE:** Catalog Numbers, list Prices and enclosure dimensions reflect contactors with AC coils. For DC coils, select Coil Code from the DC Coil Code table on page C86 and follow the instructions for modifying Catalog Numbers and list Prices.

R/F - Experience has shown that applications using non-metallic enclosures often require customized pump panels (i.e. Door-in-Door or unique control circuit). Contact your Sprecher + Schuh representative for a customized price.

### Ordering Instructions

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- ① Dimensional information starts on page C108.
- ② Fusible combo starters use the L11 or L10 Disconnect. Fuse clips accept "J" type fuses. Power fuses not supplied.
- ③ A Red and Yellow Handle may be selected instead of the standard Gray and Black handle. Change "JF" to "LF" in catalog number.