

PCEC Hydraulic Elevator Softstarter

Your Motor Protection+ Control Consultants

Increases motor life & reduces downtime

Eliminates routine maintenance

Replaces traditional Wye-Delta installations

Easy installation and setup

PCEC Controller Panel - 120V Control Voltage

DELTA Connected - 6 Wire					Line Connected - 3 Wire					With 120VAC 50/60 Hz Control Voltage	
Maximum Horsepower				Overload Range	Maximum Horsepower				Overload Range		Catalog Number
200V	240V	480V	575V		200V	240V	480V	575V			
10	10	20	30	10.9...32.9	5	5	10	15	6.3...19	PCEC-032-600V-120V	
15	15	30	40	17...51	7.5	10	20	25	10...30	PCEC-051-600V-120V	
20	20	40	60	21.3...64	10	10	25	30	12.3...37	PCEC-064-600V-120V	
20	25	50	60	24.7...74	10	15	30	40	14.3...43	PCEC-074-600V-120V	
30	40	75	100	34.7...104	15	20	40	50	20...60	PCEC-104-600V-120V	
40	50	100	150	49...147	25	30	60	75	28.3...85	PCEC-147-600V-120V	
75	75	150	200	59...234	40	50	100	125	34...135	PCEC-234-600V-120V	

PCEC Controller Panel - 230V Control Voltage

DELTA Connected - 6 Wire					Line Connected - 3 Wire					With 230VAC 50/60 Hz Control Voltage	
Maximum Horsepower				Overload Range	Maximum Horsepower				Overload Range		Catalog Number
200V	240V	480V	575V		200V	240V	480V	575V			
10	10	20	30	10.9...32.9	5	5	10	15	6.3...19	PCEC-032-600V-230V	
15	15	30	40	17...51	7.5	10	20	25	10...30	PCEC-051-600V-230V	
20	20	40	60	21.3...64	10	10	25	30	12.3...37	PCEC-064-600V-230V	
20	25	50	60	24.7...74	10	15	30	40	14.3...43	PCEC-074-600V-230V	
30	40	75	100	34.7...104	15	20	40	50	20...60	PCEC-104-600V-230V	
40	50	100	150	49...147	25	30	60	75	28.3...85	PCEC-147-600V-230V	
75	75	150	200	59...234	40	50	100	125	34...135	PCEC-234-600V-230V	

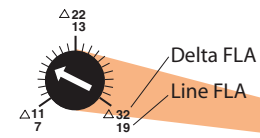
Replacement Parts

Complete Assembly (For Reference Only)	PCE Controller Only	PCE Fans	Fault Contactor	Fault Contactor Coil
PCEC-032-600V-120V	PCE-032-600V	PCV-064 (optional)	CA7-37-00-120	TC473
PCEC-051-600V-120V	PCE-051-600V		CA7-37-00-120	
PCEC-064-600V-120V	PCE-064-600V		CA7-37-00-120	
PCEC-074-600V-120V	PCE-074-600V	PCV-147	CA7-43-00-120	TD473
PCEC-104-600V-120V	PCE-104-600V		CA7-60-00-120	TE473
PCEC-147-600V-120V	PCE-147-600V		CA7-85-00-120	TE473
PCEC-234-600V-120V	See catalog	PCV-234	CA6-180-EI-11-120	CA6-TGE865

PCEC-032-600V-230V	PCE-032-600V	PCV-064 (optional)	CA7-37-00-240	TC296
PCEC-051-600V-230V	PCE-051-600V		CA7-37-00-240	
PCEC-064-600V-230V	PCE-064-600V		CA7-37-00-240	
PCEC-074-600V-230V	PCE-074-600V	PCV-147	CA7-43-00-240	TD296
PCEC-104-600V-230V	PCE-104-600V		CA7-60-00-240	TE296
PCEC-147-600V-230V	PCE-147-600V		CA7-85-00-240	TE296
PCEC-234-600V-230V	See catalog	PCV-234	CA6-180-EI-11-220W	CA6-TGE866

Digital DIP Switches

Overload Reset Manual or Automatic

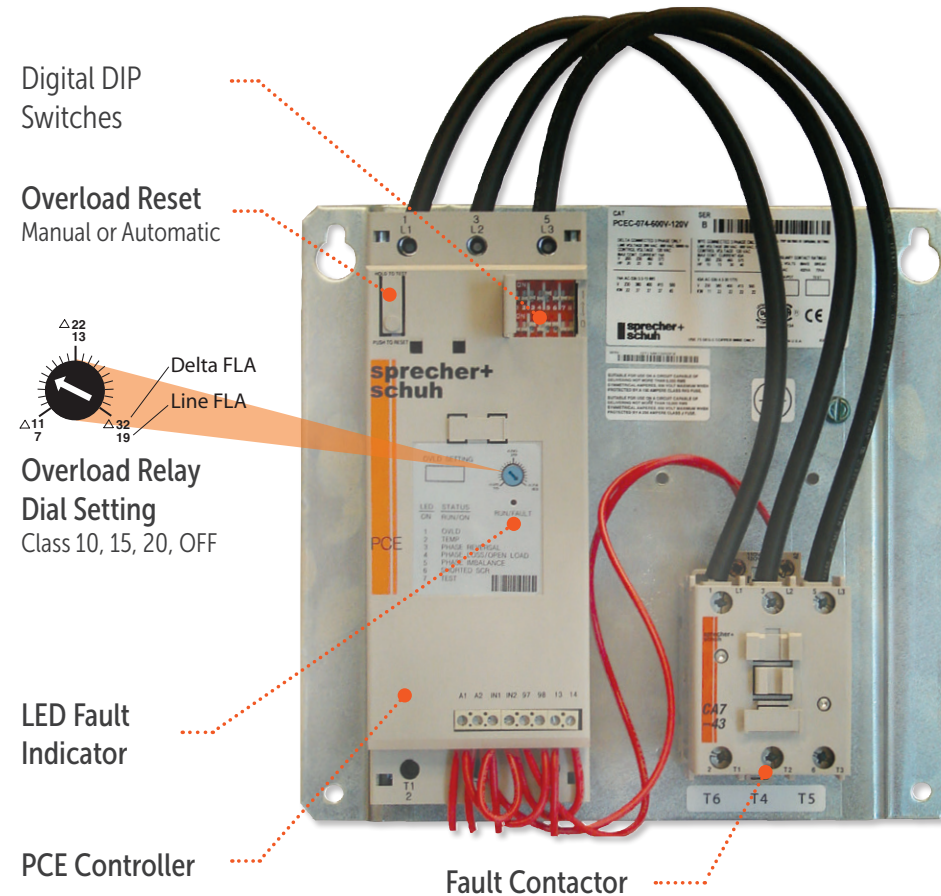


Overload Relay Dial Setting Class 10, 15, 20, OFF

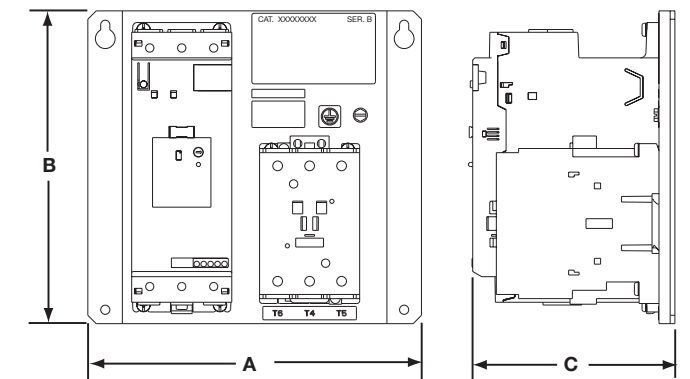
LED Fault Indicator

PCE Controller

Fault Contactor



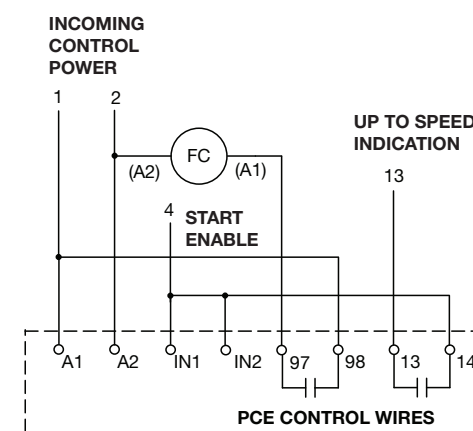
Starting/Stopping Modes	Fault Diagnostics
• Current Limit	• Overload Condition
• Soft Start	• Over Temperature - SCR
• Soft Stop	• Phase Reversal
• Coast-to-Rest	• Phase Loss/Open Load
• 0.75 second Delayed Stop	• Phase Imbalance
• Delta or Line Compatible	• Shorted SCR



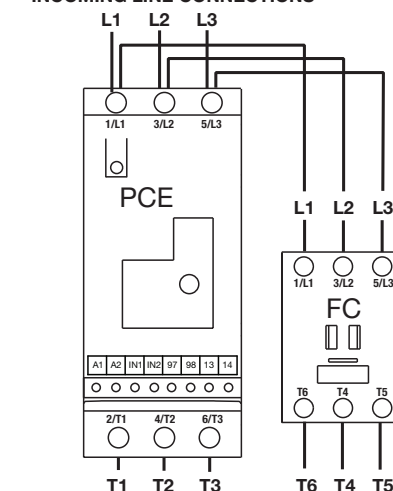
Controller Size	Units	A (Width)	B (Height)	C (Depth)	Approx. Weight
32/51/64	mm	178	144	115.7	4 lbs (2 kg)
	in	7.01	5.67	4.56	
74/104/147	mm	240	225	147.9	14 lbs (6 kg)
	in	9.45	8.86	5.82	
234	mm	362	515	216.4	51 lbs (23 kg)
	in	14.25	20.28	8.52	

For detailed technical information concerning this product, please consult your Sprecher + Schuh representative for accompanying publications.

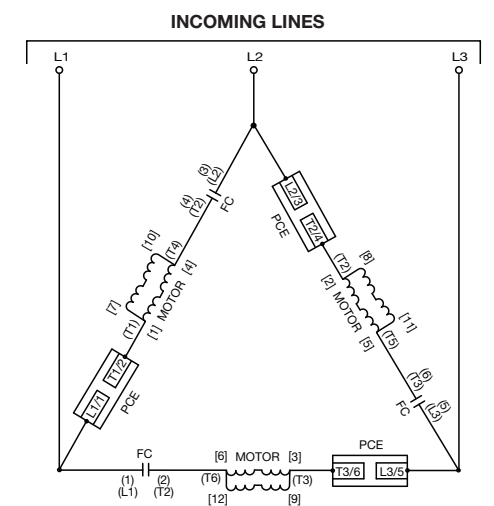
PCEC Control & Power Circuit



INCOMING LINE CONNECTIONS



Delta Connected Line Diagram




PCEC Hydraulic Elevator Softstarter

60 Hz AC Induction Motor						
Three Phase						
HP	200V	208V	230V (220-240)	400V (380-415)	460V (440-480)	575V (550-600)
	FLA	FLA	FLA	FLA	FLA	FLA
1/2	2.5	2.4	2.2	1.3	1.1	0.9
3/4	3.7	3.5	3.2	1.8	1.6	1.3
1	4.8	4.6	4.2	2.3	2.1	1.7
1 1/2	6.9	6.6	6	3.3	3	2.4
2	7.8	7.5	6.8	4.3	3.4	2.7
3	11	10.6	9.6	6.1	4.8	3.9
5	17.5	16.7	15.2	9.7	7.6	6.1
7.5	25.3	24.2	22	14	11	9
10	32.2	30.8	28	18	14	11
15	48.3	46.2	42	27	21	17
20	62.1	59.4	54	34	27	22
25	78.2	74.8	68	44	34	27
30	92	88	80	51	40	32
40	120	114	104	66	52	41
50	150	143	130	83	65	52
60	177	169	154	103	77	62
75	221	211	192	128	96	77
100	285	273	248	165	124	99
125	359	343	312	208	156	125
150	414	396	360	240	180	144
175	474	454	413	275	207	168
200	552	528	480	320	240	192
250	695	664	604	403	302	242
300	830	794	722	482	361	289
350	952	911	828	560	414	336
400	1097	1049	954	636	477	382
450	1185	1133	1030	711	515	412
600	1628	1558	1416	944	708	576
650	1764	1687	1537	1022	767	624
700	1900	1817	1652	1101	826	672
750	2036	1947	1770	1179	885	720
800	~	~	~	1258	944	768
900	~	~	~	1415	1062	864
1000	~	~	~	1573	1180	960

The information in this chart was derived from Table 430-148 & 430-150 of the NEC.

CA7 contactors



CA7 Contactors for Elevator Duty Rated Minimum Operational Life

Contactor	Cycles	Contactor	Cycles
CA7-9	500,000	CA7-43	500,000
CA7-12		CA7-55	
CA7-16		CA7-60	
CA7-23		CA7-72	
CA7-30		CA7-85	
CA7-37		CA7-97	

Life data shown are the minimum test requirements per UL/CSA. Actual life in application may exceed these values.


CS8 control relays



The CS8 Industrial Control Relay:

- Compact, space saving design
- High switching capacity
- Superior contact reliability
- AC or DC operation
- cULus & CE approval

CA7Y wye-delta contactors



The CA7Y Wye-Delta Contactor Includes:

- Line side coil terminations
- Mechanical and electrical Interlocks

Optional:

- Power Wiring available (not included)
- Elevator controllers often require additional auxiliary contacts

CA8 mini contactors



The CA8 Miniature Contactor:

- Rated 690V
- RoHS Compliant
- AC and DC Coils
- Pluggable Surge Suppressor Modules

D7D Monolithic Pilot Devices

PUSH buttons



Pilot lights



EMERGENCY stops

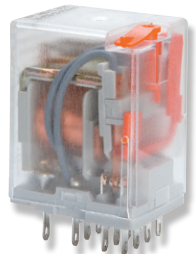


SELECTOR switches

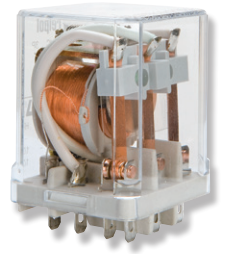


Relpol Bi-Polar Plug-In Ice Cube Relays

R4 Plug-In ice cube relays



RUC Plug-In ice cube relays



Sprecher + Schuh US Division Headquarters
 15910 International Plaza Dr., Houston, TX 77032
 Customer Service: (877) 721-5913;
 Fax: (800) 739-7370